



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION  
MARION COUNTY**

**CERTIFIED MAIL**

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 03-16353**

**Fac ID: 0351010017**

**DATE: 8/18/2005**

Nucor Steel Marion, Inc.  
John Farris  
912 Cheney Avenue  
Marion, OH 43302

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

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  
309 South Fourth Street, Room 222  
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

NWDO



Permit To Install  
Terms and Conditions

Issue Date: 8/18/2005  
Effective Date: 8/18/2005

**FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 03-16353**

Application Number: 03-16353  
Facility ID: 0351010017  
Permit Fee: **\$625**  
Name of Facility: Nucor Steel Marion, Inc.  
Person to Contact: John Farris  
Address: 912 Cheney Avenue  
Marion, OH 43302

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**912 Cheney Avenue**  
**Marion, Ohio**

Description of proposed emissions unit(s):  
**70 tons/hr electric arc furnace with baghouse and dust handling system.**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

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

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the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.8 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, 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. If this permit is for an emissions unit located at a Title V facility, then 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.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## **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.

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#### **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 re-issuance, or modification
- 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, 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 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

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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.

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## **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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

## **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 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 and the State and by citizens (to the extent allowed by section 304 of the Act) 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.

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- 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 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 ninety (90) days after commencing operation of the source(s) covered by this permit.

#### **11. Best Available Technology**

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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.

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### **13. Permit-To-Install**

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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

### **1. Compliance Requirements**

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

### **2. Reporting 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 (i.e., postmarked) quarterly, 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.

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The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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**4. Authorization To Install or Modify**

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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)**

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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**

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If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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., postmarked), 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>
PE	68.56
Fugitive PE	140.0
Fugitive PM <sub>10</sub>	81.20
NOx	110.88
Fugitive NOx	1.11
SO <sub>2</sub>	70.0
Fugitive SO <sub>2</sub>	0.70
VOC	80.08
Fugitive VOC	0.80
CO	1136.80
Fugitive CO	11.37
Pb	1.0
Fugitive Pb	0.01
Hg	0.25
Fugitive Hg	0.0025

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**PTI Application: 03-16353**  
**Modification Issued: 8/18/2005**

**Facility ID: 035101001**

**Nucon**

**PTI A**

**Modification Issued: 8/18/2005**

Emissions Unit ID: P903

**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

Nucon  
PTI A

Emissions Unit ID: P903

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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>
P903 - 70 tons/hr electric arc furnace with baghouse and dust handling system (Modification to PTI #03-14079, issued on July 8, 2004, to correct emissions violations and increase the capacity of the furnace to 70 tons/hr)	OAC rule 3745-31-05(A)(3) OAC rule 3745-31-05(C)  OAC rule 3745-31-10 through 3745-31-20

Emissions Unit ID: P903

	Applicable Emissions <u>Limitations/Control Measures</u>	
	See A.I.2.a, A.I.2.i, and A.I.2.l	17.50 lb sulfur dioxide (SO <sub>2</sub> )/hr, 70.0 tons of SO <sub>2</sub> per rolling, 12-month period (See A.I.2.b)
OAC rule 3745-17-07(A)	Baghouse Stack Emissions: 0.0050 gr of lbs particulate emissions (PE)/dscf, 68.56 tons of PE per rolling, 12-month period (See A.I.2.b & A.I.2.h)	20.02 lbs volatile organic compounds (VOC)/hr, 80.08 tons of VOC per rolling, 12-month period (See A.I.2.b)
OAC rule 3745-17-07(B)	27.72 lbs nitrogen oxides (NO <sub>x</sub> )/hr, 110.88 tons of NO <sub>x</sub> per rolling, 12-month period (See A.I.2.b)	284.20 lbs CO/hr, 1136.80 tons of CO per rolling, 12-month period (See A.I.2.b)
OAC rule 3745-17-08(B)		Fugitive Emissions: 0.70 tons of SO <sub>2</sub> per rolling 12-month period (See A.I.2.b)
OAC rule 3745-17-11(B)	0.25 lb lead (Pb)/hr, 1.0 tons of Pb per rolling, 12-month period (See A.I.2.b)	0.80 tons of VOC per rolling 12-month period (See A.I.2.b)
OAC rule 3745-18-06(E) 40 CFR, Part 60, Subpart AAa	0.063 lb mercury (Hg)/hr, 0.25 tons of Hg per rolling, 12-month period (See A.I.2.b)	11.37 tons of CO per rolling 12-month period (See A.I.2.b)
	Fugitive Emissions: 140.0 tons of fugitive PE per rolling, 12-month period (See A.I.2.b)	See A.I.2.c
		See A.I.2.d
		See A.I.2.e
		See A.I.2.f
	81.20 tons of fugitive PM <sub>10</sub> per rolling, 12-month period (See A.I.2.b)	See A.I.2.g
		See A.I.2.g
	1.11 tons of fugitive NO <sub>x</sub> per rolling, 12-month period (See A.I.2.b)	See A.I.2.j and A.I.2.k
	0.01 tons of fugitive Pb per rolling, 12-month period (See A.I.2.b)	
	0.0025 tons of fugitive Hg per rolling, 12-month period (See A.I.2.b)	
	Baghouse Stack Emissions:	

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## 2. Additional Terms and Conditions

2.a Best Available Technology (BAT) for this emissions unit has been determined to be the following:

- i. use of a baghouse with an outlet loading concentration of 0.0050 gr PE/dscf;
- ii. use of a direct-shell evacuation control system (DEC) during refining and melting;
- iii. use of a segmented canopy hood, scavenger ducting, cross-draft partitioning and closed roof monitors and also includes compliance with the requirements of 40 CFR, Part 60, Subpart AAa.

2.b The permittee has requested the following federally enforceable emission limitations established pursuant to OAC rule 3745-31-05(C) based on a daily average throughput rate and hours of operation restrictions (See A.II.1 and A.II.2) for purposes of avoiding "Prevention of Significant Deterioration" analysis:

Baghouse stack emissions:

0.0050 gr PE/dscf, 17.14 lbs PE/hr, 68.56 tons of PE per rolling, 12-month period

27.72 lbs NO<sub>x</sub>/hr, 110.88 tons of NO<sub>x</sub> per rolling, 12-month period

0.25 lb Pb/hr, 1.0 tons of Pb per rolling, 12-month period

0.063 lb Hg/hr, 0.25 tons of Hg per rolling, 12-month period

Fugitive Emissions:

140.0 tons of fugitive PE per rolling, 12-month period

81.20 tons of fugitive PM<sub>10</sub> per rolling, 12-month period

0.01 tons of fugitive Pb per rolling, 12-month period

0.0025 tons of fugitive Hg per rolling, 12-month period

2.c The permittee shall employ Best Available Control Technology (BACT) on this emissions unit. BACT has been determined to be emission limitations of 17.50 lbs SO<sub>2</sub>/hr, 70.0 tons of SO<sub>2</sub> per rolling 12-month period, 0.70 tons of fugitive SO<sub>2</sub> per rolling 12-month period, 20.02 lbs VOC/hr, 80.08 tons of VOC per rolling 12-month period, 0.80 tons of fugitive VOC per rolling 12-month period, 284.20 lbs CO/hr, 1136.80 tons of CO per rolling, 12-month period and 11.37 tons of fugitive CO per rolling 12-month period. The BACT analysis determined that no controls were cost-effective.

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- 2.d** The opacity limitation specified by this rule is less stringent than the opacity limitation established pursuant to 40 CFR, Part 60, Subpart AAa.
- 2.e** This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.f** This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08 (it is located in Marion County). Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- 2.g** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(C).
- 2.h** All PE from the baghouse stack is particulate matter less than 10 microns in size (PM<sub>10</sub>).
- 2.i.** The requirements of this rule also includes compliance with OAC rule 3745-31-05(C) and OAC rule 3745-31-10 through 3745-31-20 and 40 CFR 60.272(a)(2) & 40 CFR 60.272(a)(3).
- 2.j** The permittee shall not cause to be discharged into the atmosphere any gases which:
  - i. exit from the stack of the baghouse controlling the EAF and exhibit 3% opacity or greater; and
  - ii. exit from the melt shop due solely to the operation of the EAF and exhibit 6% opacity or greater.
- 2.k** The standard for particulate matter specified by 40 CFR 60.272a(a)(1) is less stringent the emission limit established pursuant to OAC rule 3745-31-05(C). The standard for particulate matter specified by 40 CFR 60.272a(b) is less stringent the emission limit established pursuant to OAC rule 3745-31-05(A)(3).
- 2.l** There shall be no visible particulate emissions from the building enclosing the baghouse dust handling system.

**II. Operational Restrictions**

**Nucor Steel Marion, Inc.**  
**PTI Application: 02 16252**  
**Modif**

**Facility ID: 035101001**

Emissions Unit ID: P903

1. The permittee shall not exceed an hourly throughput rate in this emissions unit of 70 tons of steel based on a daily average.
2. The maximum annual operating hours for this emissions unit, shall not exceed 8000 hours, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation 8000 hours, the permittee shall not exceed the operating hours levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Operating Hours
1	667
1-2	1334
1-3	2001
1-4	2668
1-5	3335
1-6	4002
1-7	4669
1-8	5336
1-9	6003
1-10	6670
1-11	7337
1-12	8000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

3. The pressure drop across the baghouse shall be maintained in the range of ½ to 8 inches of water while the emissions unit is in operation. The listed pressure drop range applies at all times, except during periods of cleaning, new bag installations and other scheduled maintenance operations.
4. The permittee shall follow the procedures outlined in its "Scrap Management Program" in order to minimize the use of scrap that contains mercury, lead, oils, plastics, and organic materials that are charged in the EAF. The "Scrap Management Program" was reviewed and approved by NWDO and shall be viewed as part of the operational requirements for the EAF permit. Any change to the "Scrap Management Program" that would increase the amount of these compounds present in the scrap, or result in the emissions of an air contaminant not previously emitted, must be approved by NWDO.
5. The control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be maintained at the appropriate levels established during the most recent emission testing that demonstrated that the

emissions unit was in compliance.

### III. Monitoring and/or Recordkeeping Requirements

1. Observations of the opacity of the visible emissions from the baghouse shall be performed by a certified VE observer as follows:
  - a. Visible emission observations shall be conducted at least once per day when the furnace is operating in the melting and refining period.
  - b. Visible emission observations shall be taken in accordance with Method 9 of 40 CFR, Part 60, Appendix A, and, for at least three 6-minute periods, the opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of the visible emissions, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.
  - c. Records shall be maintained of any 6-minute average that is in excess of the emission limitation specified in A.1.2.j.
2. Observations of melt shop opacity shall be performed by a certified visible emission observer as follows:
  - a. Shop opacity observations shall be conducted at least once per day when the furnace is operating in the meltdown and refining period.
  - b. Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9.
  - c. Shop opacity shall be recorded for any point(s) where visible emission are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one observation of shop opacity will be required. In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.
3. The permittee shall either: check and record the control system fan motor amperes and

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damper position on a once-per-shift basis; install, calibrate, operate and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and check and record damper positions on a once-per-shift basis. The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring devices shall have an accuracy of +/-10 percent over their normal operating range and shall be calibrated according to the manufacturer's instructions. The permittee may be required to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR Part 60.

4. When the permittee is required to demonstrate compliance with the VE limitation in section A.I.2.j.ii and at any other time that the Director (the appropriate Ohio EPA District Office or local air agency) may require, either the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility subject to A.III.3.

The permittee may petition the Director for reestablishment of these parameters whenever the permittee can demonstrate to the Administrator's satisfaction that the affected facility operating conditions upon which the parameters were previously established are no longer applicable. The values of these parameters as determined during the most recent demonstration of compliance shall be maintained at the appropriate levels for each applicable period. Operation at other than baseline values may be considered by the Director (the appropriate Ohio EPA District Office or local air agency) to be unacceptable operation and maintenance of the affected facility.

5. The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture systems (i.e., pressure sensors, dampers, and damper switches). These inspections shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion. Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Director (the appropriate Ohio EPA District Office or local air agency) to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.
6. The permittee shall maintain daily records of the following:
  - a. the tons of steel produced;
  - b. the number of hours the EAF was operated; and
  - c. the average hourly production rate (b divided by c).

7. The permittee shall maintain monthly records of the following information:
- the operating hours for each month; and
  - beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the operating hours.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

8. The permittee shall maintain monthly records of the following information:
- the calculated PE emissions for each month, in tons, using the following equation:  
$$\text{PE emissions} = (0.0050 \text{ gr/dscf}) \times (400,000 \text{ cfm}) \times (\text{lb}/7000 \text{ gr}) \times (60 \text{ min/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$
  - beginning the first month after 12 calendar months of operation, the rolling 12-month summation of PE emissions;
  - the calculated fugitive PE emissions for each month, in tons, using the following equation:  
$$\text{fugitive PE emissions} = (35 \text{ lbs/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$
  - beginning the first month after 12 calendar months of operation, the rolling 12-month summation of fugitive PE emissions;
  - the calculated fugitive PM<sub>10</sub> emissions for each month, in tons, using the following equation:  
$$\text{fugitive PM}_{10} \text{ emissions} = (20.3 \text{ lbs/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$
  - beginning the first month after 12 calendar months of operation, the rolling 12-month summation of fugitive PM<sub>10</sub> emissions;
  - the calculated SO<sub>2</sub> emissions for each month, in tons, using the following equation:  
$$\text{SO}_2 \text{ emissions} = (17.50 \text{ lb/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$
  - beginning the first month after 12 calendar months of operation, the rolling 12-month summation of SO<sub>2</sub> emissions;

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- i. the calculated fugitive SO<sub>2</sub> emissions for each month, in tons, using the following equation:

$$\text{fugitive SO}_2 \text{ emissions} = (0.18 \text{ lb/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$

- j. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of fugitive SO<sub>2</sub> emissions;

- k. the calculated NO<sub>x</sub> emissions for each month, in tons, using the following equation:

$$\text{NO}_x \text{ emissions} = (27.72 \text{ lbs/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$

- l. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of NO<sub>x</sub> emissions;

- m. the calculated fugitive NO<sub>x</sub> emissions for each month, in tons, using the following equation:

$$\text{fugitive NO}_x \text{ emissions} = (0.28 \text{ lbs/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$

- n. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of fugitive NO<sub>x</sub> emissions;

- o. the calculated VOC emissions for each month, in tons, using the following equation:

$$\text{VOC emissions} = (20.02 \text{ lbs/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$

- p. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of VOC emissions;

- q. the calculated fugitive VOC emissions for each month, in tons, using the following equation:

$$\text{fugitive VOC emissions} = (0.20 \text{ lbs/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$

- r. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of fugitive VOC emissions;

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- s. the calculated CO emissions for each month, in tons, using the following equation:
- $$\text{CO emissions} = (284.20 \text{ lbs/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$
- t. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of CO emissions;
- u. the calculated fugitive CO emissions for each month, in tons, using the following equation:
- $$\text{fugitive CO emissions} = (2.84 \text{ lbs/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$
- v. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of fugitive CO emissions;
- w. the calculated Pb emissions for each month, in tons, using the following equation:
- $$\text{Pb emissions} = (0.25 \text{ lb/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$
- x. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of Pb emissions;
- y. the calculated fugitive Pb emissions for each month, in tons, using the following equation:
- $$\text{fugitive Pb emissions} = (0.0025 \text{ lb/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$
- z. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of fugitive Pb emissions;
- aa. the calculated Hg emissions for each month, in tons, using the following equation:
- $$\text{Hg emissions} = (0.063 \text{ lb/hr}) \times (\text{A.III.7.a}) \times (\text{ton}/2000 \text{ lbs});$$
- ab. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of Hg emissions;

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- ac. the calculated fugitive Hg emissions for each month, in tons, using the following equation:  
  
fugitive Hg emissions = (0.00063 lb/hr) x (A.III.7.a) x (ton/2000 lbs); and
  - ad. beginning the first month after 12 calendar months of operation, the rolling 12-month summation of fugitive Hg emissions;
- 9. 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 installed, 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 once per shift basis.
  - 10. The permittee shall obtain a sample of the EAF baghouse dust on a monthly basis. At a minimum, the samples shall be analyzed for the magnesium, manganese, lead, zinc, and mercury contents. The results shall be reported in weight percent. This analysis shall be conducted in accordance with U.S. EPA test methods and procedures.
  - 11. The permittee shall keep daily records that indicate whether or not scrap was handled in accordance with the permittee's "Scrap Management Program".

#### **IV. Reporting Requirements**

- 1. The permittee shall submit semiannual written reports that:
  - a. identify all exceedances of gasses which exit from the stack of the baghouse controlling the EAF and exhibit 3% opacity or greater;
  - b. indicate a period of excess emission for opacity observations of gasses which exit from the melt shop due solely to the operation of the EAF and exhibit 6% opacity or greater. Excess emissions shall be reported in accordance with 40 CFR Part 60.7(c).

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

- 2. The permittee shall submit deviation (excursions) reports which identify any exceedances of the following:
  - a. daily average hourly throughput rate specified in section A.II.1 of this permit.
  - b. the rolling, 12-month operating hours limitation specified in section A.II.2 and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels.

- c. the rolling, 12-month emissions limitations specified in section A.I.1 of this permit.
- d. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.3 of the terms and conditions of this permit.
- e. all periods of time during which the scrap was not handled in accordance with the permittee's "Scrap Management Program".

The deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that identify operation of control system fan motor amperes at values exceeding + 15 percent of the value established under A.III.4 or operation at flow rates lower than those established under A.III.4. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit the results of all baghouse dust analyses. The results shall be submitted within 30 days after the analysis is completed.

## V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emissions testing shall be conducted no earlier than 12 months and no less than 6 months prior to the expiration of the current Title V permit (i.e., between May 22, 2006 and November 22, 2006) following issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE, NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, Pb and Hg.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for PE, Method 5D of 40 CFR, Part 60, Appendix A; for NO<sub>x</sub>, Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A; for CO, Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A; for SO<sub>2</sub>, Methods

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1 through 4 and 6 of 40 CFR, Part 60, Appendix A; for VOC, Methods 1 through 4 and Method 18, 25 or 25A of 40 CFR, Part 60, Appendix A; Pb, Methods 1 through 4 and 12 or 29 of 40 CFR, Part 60, Appendix A; and for Hg, Methods 1 through 4 and 29 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- d. Wise 5D shall be used for positive-pressure fabric filters to determine the PE concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 dscf) and the sampling time shall include an integral number of heats.
  - e. The test runs shall be conducted concurrently, unless inclement weather interferes.
  - f. The tests shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
2. During the PE testing, the permittee shall obtain the following additional information:
- a. for all heats covered by the test:
    - i. charge weights and materials, and tap weights and materials;
    - ii. heat times, including start and stop times, and a log of process operation, including periods of no operation during testing.
    - iii. control device operation log; and
  - b. The control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the affected facility.
3. Concurrent with the PE testing, opacity observations shall be performed to demonstrate compliance with the opacity limitations contained in A.1.2.j.i and A.1.2.j.ii. The opacity testing shall be conducted in accordance with 40 CFR Part 60.8.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

The report shall also include all information required by 40 CFR 60.276a(f).

4. Compliance with the emission limitations in Section A.I.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation: 0.0050 gr/dscf, 68.56 tons of PE per rolling, 12-month period

Applicable Compliance Method: The 0.0050 gr/dscf limitation is the established BAT maximum outlet concentration. The permittee shall demonstrate compliance with the mass limitations by emissions testing conducted in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A (See A.V.1).

The tons of PE per rolling, 12-month period limitation was developed by multiplying the maximum outlet concentration of 0.0050 gr/dscf by the maximum volumetric air flow (400,000 acfm), the appropriate conversion factors of 7000 grains/lb, 1 dscf/1 acfm, 60 minutes/hr, the maximum annual operating schedule of 8000 hrs/yr and dividing by 2000 lbs/ton. The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- b. Emission Limitation: 140.0 tons of fugitive PE per rolling, 12-month period, 81.20 tons of fugitive PM<sub>10</sub> per rolling, 12-month period

Applicable Compliance Method: The tons of fugitive PE and PM<sub>10</sub> per rolling, 12-month period limitation were developed by multiplying the AP-42 emission

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factors from Table 12.5-1 (10/86) of 50 lbs PE/ton of steel produced and 29 lbs PM<sub>10</sub>/ton of steel produced, the daily average hourly throughput rate of 70 tons/hr, the capture efficiency of 99% (1-0.99) and the maximum annual operating schedule of 8000 hrs/yr and dividing by 2000 lbs/ton. The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- c. Emission Limitation: 27.72 lbs NO<sub>x</sub>/hr, 110.88 tons of NO<sub>x</sub> per rolling, 12-month period

Applicable Compliance Method: The lbs/hr limitation was developed by multiplying the daily average hourly throughput rate of 70 tons/hr by the emission factor of 0.396 lb/ton (based on May 2004 stack test). The permittee shall demonstrate compliance with the hourly NO<sub>x</sub> limitation by emissions testing conducted in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A (See A.V.1).

The tons per rolling 12-month period limitation was developed by multiplying the lbs/hr limitation by the maximum annual operating schedule of 8000 hrs/yr and dividing by 2000 lbs/ton. The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- d. Emission Limitation: 0.25 lb Pb/hr, 1.0 tons of Pb per rolling, 12-month period

Applicable Compliance Method: The lbs/hr limitation was developed by multiplying the daily average hourly throughput of 70 tons/hr by the emission factor of 0.0035 lb/ton (based on May 2004 stack test). The permittee shall demonstrate compliance with the hourly Pb limitation by emissions testing conducted in accordance with Methods 1-4 and 12 or 29 of 40 CFR, Part 60, Appendix A.

The tons per rolling 12-month period limitation was developed by multiplying the lbs/hr limitation by the maximum annual operating schedule of 8000 hrs/yr and dividing by 2000 lbs/ton. The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- e. Emission Limitation: 0.01 tons of fugitive Pb per rolling, 12-month period

Applicable Compliance Method: The tons of fugitive Pb per rolling, 12-month period limitation was developed by multiplying the annual Pb limitation by the capture efficiency of 99% (1-0.99). The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- f. Emission Limitation: 0.063 lb Hg/hr, 0.25 tons of Hg per rolling, 12-month period

Applicable Compliance Method: The lbs/hr limitation was developed by multiplying the daily average hourly throughput of 70 tons/hr by the emission factor of 0.0009 lb/ton (based on December 1999 stack test). The permittee shall demonstrate compliance with the hourly Hg limitation by emissions testing conducted in accordance with Methods 1-4 and 29 of 40 CFR, Part 60, Appendix A.

The tons per rolling 12-month period limitation was developed by multiplying the lbs/hr limitation by the maximum annual operating schedule of 8000 hrs/yr and dividing by 2000 lbs/ton. The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- g. Emission Limitation: 0.0025 tons of fugitive Hg per rolling, 12-month period

Applicable Compliance Method: The tons of fugitive Hg per rolling, 12-month period limitation was developed by multiplying the annual Hg limitation by the capture efficiency of 99% (1-0.99). The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- h. Emission Limitation: 17.50 lbs SO<sub>2</sub>/hr, 70.0 tons of SO<sub>2</sub> per rolling, 12-month period

Applicable Compliance Method: The lbs/hr limitation was developed by multiplying the daily average hourly throughput rate of 70 tons/hr by the emission factor of 0.25 lb/ton (based on September 1999 stack test). The permittee shall demonstrate compliance with the hourly SO<sub>2</sub> limitation by emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A (See A.V.1).

The tons per rolling 12-month period limitation was developed by multiplying the lbs/hr limitation by the maximum annual operating schedule of 8000 hrs/yr and dividing by 2000 lbs/ton. The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- i. Emission Limitation: 0.70 tons of fugitive SO<sub>2</sub> per rolling, 12-month period

Applicable Compliance Method: The tons of fugitive SO<sub>2</sub> per rolling, 12-month period limitation was developed by multiplying the annual SO<sub>2</sub> limitation by the capture efficiency of 99% (1-0.99). The permittee shall demonstrate compliance

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with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- j. Emission Limitation: 20.02 lbs VOC/hr, 80.08 tons of VOC per rolling, 12-month period

Applicable Compliance Method: The lbs/hr limitation was developed by multiplying the daily average hourly throughput rate of 70 tons/hr by the emission factor of 0.286 lb/ton (based on September 1999 stack test). The permittee shall demonstrate compliance with the hourly VOC limitation by emissions testing conducted in accordance with Methods 1-4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A (See A.V.1).

The tons per rolling 12-month period limitation was developed by multiplying the lbs/hr limitation by the maximum annual operating schedule of 8000 hrs/yr and dividing by 2000 lbs/ton. The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- k. Emission Limitation: 0.80 tons of fugitive VOC per rolling, 12-month period

Applicable Compliance Method: The tons of fugitive VOC per rolling, 12-month period limitation was developed by multiplying the annual VOC limitation by the capture efficiency of 99% (1-0.99). The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- l. Emission Limitation: 284.20 lbs CO/hr, 1136.80 tons of CO per rolling, 12-month period

Applicable Compliance Method: The lbs/hr limitation was developed by multiplying the daily average hourly throughput rate of 70 tons/hr by the emission factor of 4.06 lbs/ton (based on May 2004 stack test). The permittee shall demonstrate compliance with the hourly CO limitation by emissions testing conducted in accordance with Methods 1-4 and 10 of 40 CFR, Part 60, Appendix A (See A.V.1).

The tons per rolling 12-month period limitation was developed by multiplying the lbs/hr limitation by the maximum annual operating schedule of 8000 hrs/yr and dividing by 2000 lbs/ton. The permittee shall demonstrate compliance with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- m. Emission Limitation: 11.37 tons of fugitive CO per rolling, 12-month period

Applicable Compliance Method: The tons of fugitive CO per rolling, 12-month period limitation was developed by multiplying the annual CO limitation by the capture efficiency of 99% (1-0.99). The permittee shall demonstrate compliance

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with the tons per rolling 12-month period limitation by the recordkeeping in section A.III.8.

- n. Emission Limitation: 3% opacity from the exit of the EAF baghouse

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible emissions limitation above pursuant to Method 9 of 40 CFR, Part 60, Appendix A.

- o. Emission Limitation: 6% opacity from the exits of the melt shop due solely to the operation of the EAF

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible emissions limitation above pursuant to Method 9 of 40 CFR, Part 60, Appendix A.

- p. Emission Limitation: There shall be no visible emissions from the building enclosing the baghouse dust handling system.

Applicable Compliance Method: The permittee shall demonstrate compliance with the visible emissions limitation above pursuant to Method 22 of 40 CFR, Part 60, Appendix A.

**VI. Miscellaneous Requirements**

None

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## 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>
P903 - 70 tons/hr electric arc furnace with baghouse and dust handling system (Modification to PTI #03-14079, issued on July 8, 2004, to correct emissions violations and increase the capacity of the furnace to 70 tons/hr)		See B.III.1 below

### 2. Additional Terms and Conditions

2.a None

## II. Operational Restrictions

None

## III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit (P903) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISCST3 (00101) model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISCST3 (00101) model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant:

Pollutant: Mercury

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TLV (ug/m3): 25

Maximum Hourly Emission Rate (lbs/hr): 0.063 (point source emissions + fugitive emissions)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.60

MAGLC (ug/m3): 0.60

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

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- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None