Ohio Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

Certified Mail

5/25/2010

MICHAEL CONNOLLY
TUBE CITY IMS - VM
1155 BUSINESS CENTER DR
STE 200
HORSHAM, PA 19044-3454

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0278020754
Permit Number: P0104507
Permit Type: OAC Chapter 3745-31 Modification
County: Trumbull

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Ohio Treasurer Kevin Boyce," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. 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, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NEDO

Ohio Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
TUBE CITY IMS - VM

Facility ID: 0278020754
Permit Number: P0104507
Permit Type: OAC Chapter 3745-31 Modification
Issued: 5/25/2010
Effective: 5/25/2010
Expiration: 5/25/2015

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
TUBE CITY IMS - VM

Table of Contents

Authorization

Facility ID: 0278020754
Application Number(s): A0037013
Permit Number: P0104507
Permit Description: Chapter 31 modification to PTI No. 02-13973 to increase EAF slag process production from 130,000 tons per year to 300,000 tons.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: $5,400.00
Issue Date: 5/25/2010
Effective Date: 5/25/2010
Expiration Date: 5/25/2015
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

TUBE CITY IMS - VM
2669 MARTIN LUTHER KING JR BLVD
Youngstown, OH 44510

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0104507
Permit Description: Chapter 31 modification to PTI No. 02-13973 to increase EAF slag process production from 130,000 tons per year to 300,000 tons.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**F001**
Company Equipment ID:	Roadways & Parking Areas
Superseded Permit Number:	02-13973
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F002**
Company Equipment ID:	Unprocessed Slag and Product Storage Piles
Superseded Permit Number:	02-13973
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F003**
Company Equipment ID:	EAF Slag Processing Plant
Superseded Permit Number:	02-13973
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F004**
Company Equipment ID:	EAF Slag Dumping Station
Superseded Permit Number:	02-13973
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F005**
Company Equipment ID:	Oxygen Lancing
Superseded Permit Number:	02-13973
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F006**
Company Equipment ID:	Drop Ball Pit
Superseded Permit Number:	02-13973
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

  You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Northeast District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting[1] a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

[1] Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

   a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

      (1) None.

   b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

      (1) None.

C. Emissions Unit Terms and Conditions

1. F001, Roadways & Parking Areas

Operations, Property and/or Equipment Description:

Roadways and parking areas

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-13973)	Fugitive particulate matter with a diameter less than 10 microns (PM10) shall not exceed 3.80 tons/year. Fugitive particulate emissions (PE) shall not exceed 19.45 tons/year. There shall be no visible PE of fugitive dust except for 3 minutes during any 60-minute period. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)a through b)(2)f.
b.	OAC rule 3745-17-07(B)(5)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08(B)	See b)(2)a through b)(2)f.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the unpaved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for unpaved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

c. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

d. Any unpaved roadway or parking area that is subsequently paved, will require a General Permit for paved roadways and parking areas.

e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

unpaved roadways and parking areas	minimum inspection frequency
all roads and parking areas	daily

(2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

(3) The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(3)d shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitations:

Fugitive PM10 shall not exceed 3.80 tons/year.

Fugitive PE shall not exceed 19.45 tons/year.

Applicable Compliance Method:

Compliance with fugitive PE and PM10 limitations shall be determined by using the emission factor equations in Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 12/03) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used. These emission limits were based on a maximum of 62,430 vehicle miles traveled per year, and a 95% control efficiency for PE and PM10.

b. Emission Limitation:

There shall be no visible PE of fugitive dust from unpaved roadways and parking areas except for a period of time not to exceed 3 minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.

2. F002, Unprocessed Slag and Product Storage Piles

Operations, Property and/or Equipment Description:

Unprocessed slag and product storage piles

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-13973)	Fugitive particulate matter with a diameter less than or equal to 10 microns (PM10) shall not exceed 0.33 ton/year. Fugitive particulate emissions (PE) shall not exceed 0.71 ton/year. There shall be no visible PE of fugitive dust except for a period of time not to exceed 1 minute in any 60-minute observation period. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)a through b)(2)e.
b.	OAC rule 3745-17-07(B)	The emission limitation required by this applicable rule is less stringent than the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08(B)	See b)(2)a through b)(2)e.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintain minimal drop heights for stackers and front-loaders, and chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance.

b. The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

c. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

d. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the application, the permittee has committed to perform one or more of the following: (chemical stabilization, watering/sprinkling systems/hoses, covering the storage piles) to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

e. The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The permittee shall restrict the annual EAF slag processed to 300,000 tons per year, based upon a rolling, 12-month summation of the production rates. This is an existing emissions unit which has existing records of the amount of production and, therefore, does not need to be restricted on a monthly basis.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

storage pile identification	minimum load-in inspection frequency
all	twice per shift during daylight hours

(2) Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

storage pile identification	minimum load-out inspection frequency
all	twice per shift during daylight hours

(3) Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

storage pile identification	minimum wind erosion inspection frequency
all	twice per shift during daylight hours

(4) No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

(5) The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

(6) The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(6)d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emissions Limitations:

Fugitive PM10 shall not exceed 0.33 ton/year.

Fugitive PE shall not exceed 0.71 ton/year.

Applicable Compliance Method:

Compliance with fugitive PE limitations shall be determined by using the emission factor equations in Sections 13.2.4 and 13.2.5, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/95), for load-in operations, load-out operations, and wind erosion. These emission limits were based on a maximum production of 300,000 tons per year, a maximum storage surface area less than or equal to 6 acres, and a 90% overall control efficiency for PE and PM10.

b. Emission Limitation:

There shall be no visible PE of fugitive dust except for a period of time not to exceed 1 minute in any 60-minute observation period.

Applicable Compliance Method:

Compliance with the visible PE limitation for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in “Appendix

on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.

3. F003, EAF Slag Processing Plant

Operations, Property and/or Equipment Description:

Modification to PTI No. 02-13973. Plant material handling operations including conveyors, conveyor transfer points, crushers, and screens. The maximum annual production rate from this emissions unit is limited to 300,000 tons.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(1)(b)	Fugitive particulate emissions (PE) shall not exceed 1.15 lbs/hr and 0.86 ton per rolling, 12-month period. Fugitive particulate matter with a diameter less than or equal to 10 microns (PM10) shall not exceed 0.55 lb/hr and 0.41 ton per rolling, 12-month period.
b.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

a. The material handling operation(s) that are covered by this permit and subject to the requirements of b)(1) are listed below:

i. Conveyors and associated transfer points;

ii. Conveyor drop points;

iii. Gizzlies; and

iv. Screens.

b. The permits shall employ best available control measures for material handling operation(s) for the purpose of ensuring compliance with the applicable requirements of b)(1). The permittee shall implement the following control measure(s) to ensure compliance with the applicable requirements of b)(1):

Material handling operation(s)	Control measure(s)
All conveyors and associated transfer points	Use of water sprays to sufficiently wet slag to meet the applicable requirements of b)(1) throughout processing height; minimize drop height.
All conveyors drop points	Use of water sprays to sufficiently wet slag to meet the applicable requirements of b)(1) throughout processing height; minimize drop height.
All screens	Use of water sprays to sufficiently wet slag to meet the applicable requirements of b)(1) throughout processing height; minimize drop height.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

c. For each material handling operation that is not adequately enclosed, the control measure(s) specified in b)(2)b shall be implemented as needed to meet applicable requirements of b)(1) during operation. If the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this

permit, that additional control measure(s) is (are) necessary to ensure compliance with the applicable requirements of b)(1), such additional control measures shall be implemented immediately. Any required implementation of the additional control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of these additional control measures(s) is unnecessary.

d. Specified additional control measures shall be determined by the permittee. Such additional control measures may include increase water application, use of chemical dust suppressant, or shut-down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations.

e. Implementation of the control measure(s) specified in b)(2)b in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08.

f. All transfer points and screens identified in b)(2)b. within the processing plant shall have an adequate water source available. In the case of failure or malfunction of any individual water spray, the failure or malfunction shall be reported as described in d)(1)c and d)(1)d of this permit.

g. In the event of failure or malfunction of a pump affecting more than one water spray location, the permittee shall evaluate visible emissions from such affected points upon discovery. Should observations indicate a potential or actual violation of visible emissions limitations, the permittee shall perform one or more of the following until normal control measures are restored:

i. utilize portable water sprays at the affected locations;

ii. shut down the affected sources until repairs are made; and

iii. increase water flow to “upstream” conveyors to ensure that slag maintains sufficient moisture to prevent visible emissions violations from points of malfunctioning sprayers.

c) Operational Restrictions

(1) The permittee shall restrict the facility-wide annual EAF slag processed to 300,000 tons per year, based upon a rolling, 12-month summation of the production rates. This is an existing emissions unit which has existing records of the amount of production and, therefore, does not need to be restricted on a monthly basis.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

Material handling operation(s)	Minimum inspection frequency
All conveyors and associated transfer points	Monitoring twice per shift during daylight hours.
All conveyors drop points	Monitoring twice per shift during daylight hours.
All screens, and feeders	Monitoring twice per shift during daylight hours.

The inspections shall be performed during representative, normal operating conditions.

(2) The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the requirements of b)(1) of this permit.

(3) The permittee shall maintain monthly records of the following information:

a. the amount of EAF slag processed each month;

b. the rolling, 12-month summation of the EAF slag processed; and

c. the rolling, 12-month summation of the PM and PM10 emissions.

(4) The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined that a malfunction occurred in any individual water spray or pump servicing the slag processing plant (conveyors, transfer points, drop points, screens, feeder, and/or crusher);

c. the date of each inspection where it was determined by the permittee that it was necessary to implement additional control measure(s);

d. the dates that the additional control measure(s) was (were) implemented;

e. a description of the additional controls implemented; and

f. on a calendar quarter basis, the total number of days additional control measure(s) was (were) implemented.

The information in paragraph d)(4)f shall be kept separately for each material handling operation and shall be updated on a quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. Fugitive PE shall not exceed 0.86 ton per rolling, 12-month period.

ii. Fugitive PM10 shall not exceed 0.41 ton per rolling, 12-month period.

iii. The permittee shall restrict the facility-wide annual EAF slag processed to 300,000 tons per year, based upon a rolling, 12-month summation of the production rates.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Ohio EPA Northeast District Office).

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance with the allowable visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

Fugitive PE shall not exceed 1.15 lbs/hr.

Applicable Compliance Method:

To determine the hourly particulate emission rate for this emissions unit, the following (controlled) emission factors shall be used:

Conveyor transfer points: 1.01×10^{-4} lb PE/ton material processed, as specified in AP-42, Table 11.19.2-2 (1/95)

Feeder loading: 0.001732 lb PE/ton material processed, as derived from equation 1 of AP-42, Section 13-2.4

Screening: 0.001764 lb PE/ton material processed, as specified in AP-42, Table 11.19.2-2 (1/95)

These emission factors shall be used in the following equation:

Htotal = Ht + Hf +Hs

where:

Htotal = total hourly emissions for all transfer point, feeder, and screens (lb/hr);

Ht = hourly PE emissions from transfer points, lbs/hr;

Hf = hourly PE emissions for feeder loading, lbs/hr; and

Hs = hourly PE emissions for screens, lbs/hr.

c. Emission Limitation:

Fugitive PM10 emissions shall not exceed 0.55 lb/hr.

Applicable Compliance Method:

To determine the hourly PM10 emission rate for this emissions unit, the following (controlled) emission factors shall be used:

Conveyor transfer points: 4.8×10^{-5} lb PM10/ton material processed, as specified in AP-42, Table 11.19.2-2 (1/95)

Feeder loading: 0.00082 lb PM10/ton material processed, as derived from equation 1 of AP-42, Section 13-2.4

Screening: 0.00084 lb PM10/ton material processed, as specified in AP-42, Table 11.19.2-2 (1/95)

These emission factors shall be used in the following equation:

Htotal = Ht + Hf +Hs

where:

Htotal = total PM10 hourly emissions for all transfer point, feeder, and screens (lb/hr);

Ht = hourly PM10 emissions from transfer points, lbs/hr;

Hf = hourly PM10 emissions for feeder loading, lbs/hr; and

Hs = hourly PM10 emissions for screens, lbs/hr.

d. Emission Limitation:

Fugitive PE shall not exceed 0.86 tpy.

Applicable Compliance Method:

To determine the annual particulate emission rate for this emissions unit, the following (controlled) emission factors shall be used:

Conveyor transfer points: 1.01×10^{-4} lb PE/ton material processed, as specified in AP-42, Table 11.19.2-2 (1/95)

Feeder loading: 0.001732 lb PE/ton material processed, as derived from equation 1 of AP-42, Section 13-2.4

Screening: 0.001764 lb PE/ton material processed, as specified in AP-42, Table 11.19.2-2 (1/95)

These emission factors shall be used in the following equation:

Atotal = At + Af +As

where:

Atotal = total annual emissions for all transfer point, feeder, and screens (tpy);

At = annual PE emissions from transfer points, tpy;

Af = annual PE emissions for feeder loading, tpy; and

As = annual PE emissions for screens, tpy.

e. Emission Limitation:

Fugitive PM10 emissions shall not exceed 0.41 tpy.

Applicable Compliance Method:

To determine the annual PM10 emission rate for this emissions unit, the following (controlled) emission factors shall be used:

Conveyor transfer points: 4.8×10^{-5} lb PM10/ton material processed, as specified in AP-42, Table 11.19.2-2 (1/95)

Feeder loading: 0.00082 lb PM10/ton material processed, as derived from equation 1 of AP-42, Section 13-2.4

Screening: 0.00084 lb PM10/ton material processed, as specified in AP-42, Table 11.19.2-2 (1/95)

These emission factors shall be used in the following equation:

Atotal = At + Af +As

where:

Atotal = total annual emissions for all transfer point, feeder, and screens (tpy);

At = annual PM10 emissions from transfer points, tpy;

Af = annual PM10 emissions for feeder loading, tpy; and

As = annual PM10 emissions for screens, tpy.

g) Miscellaneous Requirements

(1) None.

4. F004, EAF Slag Dumping Station

Operations, Property and/or Equipment Description:

EAF slag pot dump pit and associated material handling operations

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(1)(b)	Fugitive particulate emissions (PE) shall not exceed 2.01 lbs/hr and 8.81 tons per rolling, 12-month period (combined emissions from slag excavation and molten EAF slag dumping). Fugitive particulate matter with a diameter less than or equal to 10 microns (PM10) shall not exceed 0.93 lb/hr and 4.06 tons per rolling, 12-month period (combined emissions from slag excavation and molten EAF slag dumping).
b.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

a. The material handling operation(s) that are covered by this permit and subject to the requirements of b)(1) are listed below:

i. EAF slag pot dump pit; and

ii. material handling operations within the pit (including excavations).

b. The permits shall employ best available control measures for material handling operation(s) for the purpose of ensuring compliance with the applicable requirements of b)(1). The permittee shall implement the following control measure(s) to ensure compliance with the applicable requirements of b)(1):

Material handling operation(s)	Control measure(s)
EAF slag dump pit	Use of water sprays to sufficiently wet slag to meet the applicable requirements of b)(1) as it is being dumped; minimize drop height.
Material handling operations within the pit (including excavation)	Use of water sprays to sufficiently wet slag to meet the applicable requirements of b)(1) throughout the handling process; minimize drop height.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

c. For each operation that is not adequately enclosed, the control measure(s) specified in b)(2)b shall be implemented as needed during operation. If the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that additional control measure(s) is (are) necessary to ensure compliance with the applicable requirements of b)(1), such additional control measures shall be implemented immediately. Any required implementation of the additional control measure(s) shall continue during operation until further observation confirms that use of these additional control measure(s) is unnecessary.

d. Specific additional control measures shall be determined by the permittee. Such additional control measures may include increased water application, use of chemical dust suppressant, or shut-down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations.

e. Implementation of the control measure(s) specified in b)(2)b in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08(B).

f. All operations identified in b)(2)b within the slag dumping pit shall have an available water source. In the case of failure or malfunction of any individual water spray, the failure or malfunction shall be reported as described in e)(1)c and e)(1)d.

g. In the event of failure or malfunction of a pump affecting more than one water spray location at or within the dump pit, the permittee shall evaluate visible emissions from such affected points upon discovery. Should observations indicate a potential or actual violation of visible emissions limitations, the permittee shall perform one or more of the following until normal control measures are restored:

i. utilize portable water sprays at the affected locations; and

ii. shut down the affected sources until repairs are made.

h. The permittee shall apply water, to molten slag upon completion of dumping into the pit. Sufficient water shall be applied to the slag as needed in order to eliminate visible emissions created by slag fuming.

i. The permittee shall not remove the slag that has not been adequately wetted, as determined through Monitoring and Record keeping Requirements in d)(1).

j. All fires caused by direct or indirect exposure to molten/hot slag shall be extinguished upon discovery.

k. No material other than EAF slag shall be dumped or otherwise handled in this emissions unit. If any other materials are dumped/handled in this unit, the event shall be considered a malfunction and recorded/reported as described in d)(4) and e)(1).

l. No more than one EAF slag pot shall be dumped at a time.

c) Operational Restrictions

(1) The permittee shall restrict the facility-wide annual EAF slag processed to 300,000 tons per year, based upon a rolling, 12-month summation of the production rates. This is an existing emissions unit which has existing records of the amount of production and, therefore, does not need to be restricted on a monthly basis.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, for operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

Material handling operation(s)	Minimum inspection frequency
EAF slag dump pit	Monitoring twice per shift during daylight hours.
Material handling operations within the pit (including excavation)	Monitoring twice per shift during daylight hours.

The inspections shall be performed during representative, normal operating conditions.

(2) The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the requirements of b)(1) of this permit.

(3) The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined that a malfunction occurred in any individual water spray or pump servicing the slag processing plant (including EAF dumping and EAF slag material handling);

c. the date of each inspection where it was determined by the permittee that it was necessary to implement additional control measure(s);

d. the dates that the additional control measure(s) was (were) implemented;

e. a description of the additional controls implemented; and

f. on a calendar quarter basis, the total number of days additional control measure(s) was (were) implemented.

The information in paragraph d)(3)f shall ne kept separately for each material handling operation and shall be updated on a quarter basis within 30 days after the end of each calendar quarter.

(4) In the event that any material other than EAF slag is dumped into this emissions unit, the permittee must record the following information for each separate occurrence:

a. type of material poured into the EAF slag pit;

b. quantity of material poured into the EAF slag pit; and

c. date and time that the material was poured.

(5) The permittee shall maintain monthly records of the following information:

a. the amount of EAF slag processed each month;

b. the rolling, 12-month summation of the EAF slag processed; and

c. the rolling, 12-month summation of the PM and PM10 emissions.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. Fugitive PE shall not exceed 8.81 tons per rolling, 12-month period (combined emissions from slag excavation and molten EAF slag dumping).

ii. Fugitive PM10 shall not exceed 4.06 tons per rolling, 12-month period (combined emissions from slag excavation and molten EAF slag dumping).

iii. The permittee shall restrict the facility-wide annual EAF slag processed to 300,000 tons per year, based upon a rolling, 12-month summation of the production rates.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Ohio EPA Northeast District Office).

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance with the allowable visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

Fugitive PE shall not exceed 2.01 lbs/hr (combined emissions from slag excavation and molten EAF slag dumping).

Applicable Compliance Method:

Compliance with the particulate emission limitation shall be determined by the following equation:

E = A*(B+C)

where:

E = maximum hourly particulate emissions rate in lbs/hr;

A = maximum hourly “EAF slag dumping” process weight rate, 34.25 tons/hr;

B = molten steel EAF slag emission factor, 0.057 lb of PE/ton (from PTI No. 02-13973, issued on June 5, 2001); and

C = slag excavation emission factor, 0.001732 lb of PE/ton (from PTI No. 02-13973, issued on June 5, 2001).

c. Emission Limitation:

Fugitive PE shall not exceed 8.81 tons per year based upon a rolling, 12-month summation (combined emissions from slag excavation and molten EAF slag dumping).

Applicable Compliance Method:

Compliance with the particulate emissions limitations shall be determined by the following equation:

E = A(B+C) / D

where:

E = maximum annual particulate emissions rate in tons/year;

A = annual "EAF slag dumping" processed based upon the record keeping requirements specified in d)(5) above, in tons/year;

B = molten steel EAG slag emission factor, 0.057 lb of PE/ton (from PTI No. 02-13973, issued on June 5, 2001);

C = slag excavation emission factor, 0.001732 lb of PE/ton (calculated EF from PTI no. 02-13973 (issued on June 5, 2001) using equation 1 of AP-42, 13.2.4.3 (1/95 version); and

D = 2000 lbs per ton.

d. Emission Limitation:

Fugitive PM10 emissions shall not exceed 0.93 lb/hr (combined emissions from slag excavation and molten EAF slag dumping).

Applicable Compliance Method:

Compliance with the particulate emission limitation shall be determined by the following equation:

E = A*(B+C)

where:

E = maximum hourly PM10 emissions rate in lbs/hr;

A = maximum hourly "EAF slag dumping" process weight rate, 34.25 tons/hr;

B = molten steel EAG slag emission factor, 0.0.0262 lb of PM10/ton (from PTI No. 02-13973, issued on June 5, 2001); and

C = slag excavation emission factor, 0.00082 lb of PM10/ton (calculated EF from PTI no. 02-13973 (issued on June 5, 2001) using equation 1 of AP-42, 13.2.4.3 (1/95 version).

e. Emission Limitation:

Fugitive PM10 emissions shall not exceed 4.06 tons per year based upon a rolling, 12-month summation (combined emissions from slag excavation and molten EAF slag dumping).

Applicable Compliance Method:

Compliance with the particulate emission limitation shall be determined by the following equation:

E = A(B+C) / D

where:

E = maximum annual PM10 emissions rate in tons/year;

A = annual "EAF slag dumping" processed based upon the record keeping requirements specified in d)(5) above, in tons/year;

B = molten steel EAG slag emission factor, 0.0262 lb of PM10/ton (from PTI No. 02-13973, issued on June 5, 2001);

C = slag excavation emission factor, 0.00082 lb of PM10/ton (calculated EF from PTI no. 02-13973 (issued on June 5, 2001) using equation 1 of AP-42, 13.2.4.3 (1/95 version); and

D = 2000 lbs per ton.

g) Miscellaneous Requirements

(1) None.

5. F005, Oxygen Lancing

Operations, Property and/or Equipment Description:

Oxygen lance cutting operations

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Oxygen Lance cutting operations	
a.	OAC rule 3745-31-05(D)(1)(b)	Fugitive particulate emissions and fugitive particulate matter with a diameter less than or equal to 10 microns (PE/PM10) shall not exceed 5.60 lbs/hr and 5.60 tons per rolling, 12-month period.
b.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average from oxygen lance cutting operations.
c.	OAC rule 3745-17-08(B)	See b)(2)a.
	Oxygen Lance material handling operations	
d.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average from oxygen lance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		material handling operations.
e.	OAC rule 3745-17-08(B)	See b)(2)a.

(2) Additional Terms and Conditions

a. The material handling operation(s) that are covered by this permit and subject to the requirements of b)(1) are listed below:

i. oxygen lancing station; and

ii. oxygen lancing material handling operations.

b. The permits shall employ best available control measures for material handling operation(s) for the purpose of ensuring compliance with the applicable requirements of b)(1). The permittee shall implement the following control measure(s) to ensure compliance with the applicable requirements of b)(1):

Material handling operation(s)	Control measure(s)
Oxygen lancing operations	Use of carbon dioxide (CO2) suppression to meet the applicable requirements during lancing operation.
Oxygen lancing material handling operations	Use of water sprays during material handling operations to meet the applicable requirements; minimize drop height

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

c. For each operation that is not adequately enclosed, the control measure(s) specified in b)(2)b shall be implemented as needed during operation. If the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that additional control measure(s) is (are) necessary to ensure compliance with the applicable requirements of b)(1), such additional control measures shall be implemented immediately. Any required implementation of the additional control measure(s) shall continue during operation until further observation confirms that use of these additional control measure(s) is unnecessary.

d. Specific additional control measures shall be determined by the permittee. Such additional control measures for oxygen lancing operations may include increased CO2 flow, use of portable baghouse units, or shut-down of operations. Such

additional control measures for material handling operations may include increased water application, use of chemical dust suppressant, or shut down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations.

e. Implementation of the control measure(s) specified in b)(2)b in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08(B).

f. The permittee shall utilize the CO2 suppression system during operation of this emissions unit in accordance with manufacturer's recommendations during all lancing activities. CO2 shall be delivered through the lance at sufficient pressure and flow rate to meet the requirement of b)(1).

g. In the event that the permittee fails to utilize or incorrectly utilizes CO2 suppression during oxygen lancing operations, visible emissions shall be evaluated from such affected points upon discovery. Should observations indicated a potential or actual violation of visible emissions limitations, one or more of the following shall be performed until normal control measures are restored:

   i. immediately established CO2 flow at correct rate and pressure from permanent or portable tanks;

   ii. utilize portable baghouse unit(s) to achieve a control efficiency equivalent to that of CO2 suppression; or

   iii. shut down the affected sources until repairs/corrections are made.

h. All oxygen and carbon dioxide tanks associated with the lancing operations shall be equipped with the following gauges:

   i. pressure gauge; and

   ii. gauge capable of displaying the volume or weight of gas or liquid present in tank.

i. Lacing operations shall not be performed if CO2 pressure falls below the manufacturer's recommended pressure or if it is otherwise determined that the CO2 tank(s) do not contain sufficient CO2 to supply the lancing operations for the duration of the activity.

j. The permittee shall apply an adequate amount of water to the cutting areas as needed to meet the applicable requirements of b(1). Material handling operations shall not be conducted with hot material or material that has not been adequately wetted, as determined through Monitoring and Record Keeping Requirements d)(1), below.

k. Should observations indicate a potential or actual violation of visible emissions limitations, one or more of the following shall be performed until normal control measures are restored:

i. immediately apply adequate water or other suitable dust suppressant to the cutting area; and

ii. shut down the affected sources until repairs/corrections are made.

l. The permittee shall install and maintain a gauge capable of displaying CO2 gas pressure on the outlet side of the oxygen/CO2 manifold, between the manifold and the oxygen lance, and on the outlet side of all valves prior to the nozzle.

c) Operational Restrictions

(1) The permittee shall process no more than 40,000 tons of metal scrap per rolling, 12-month period. This is an existing emissions unit which has existing records of the amount of scrap metal processed and, therefore, does not need to be restricted on a monthly basis.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, for operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

Material handling operation(s)	Minimum inspection frequency
All lancing operations	Monitoring of visible emissions twice per shift during daylight hours.
Material handling operations	Inspect for adequate cooling and moisture content prior to commencing any material handling operations; monitoring of visible emissions twice per shift during daylight hours.

The inspections shall be performed during representative, normal operating conditions.

(2) The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the requirements of b)(1) of this permit.

(3) The permittee shall perform daily inspections of all lancing equipment prior to beginning any lancing operations. Operators shall, at a minimum, inspect the following:

a. CO2 and oxygen tank pressure gauges for proper operation and adequate tank pressure;

b. CO2 and oxygen tank weigh/volume gauges for proper operation and adequate gas supply;

c. all hoses and lines for cracks, leaks or other damge;

d. all couplings and fittings for cracks, leaks, or other damage; and

e. all valves for proper operation and flow.

(4) The permittee shall maintain records of the following information for oxygen lancing and associated material handling operations:

a. the date and reason any inspection as required in d)(1) was not performed;

b. the date of each inspection where it was determined that visible emissions indicated a malfunction of oxygen lancing and/or material handling control measures;

c. the date of each inspection where it was determined by the permittee that it was necessary to implement additional control measure(s) for either operation;

d. the dates that the additional control measure(s) was (were) implemented;

e. a description of the additional controls implemented; and

f. on a calendar quarter basis, the total number of days that additional control measure(s) was (were) implemented.

The information shall be kept for lancing and associated material handling operations.

(5) The permittee shall maintain the following daily records for the oxygen lancing operations:

a. the date that any inspection as required in d)(3) revealed damaged or incorrectly operating equipment or gauges, inadequate tank pressure, or inadequate gas supply;

b. actions taken to correct the problem;

c. the date that equipment or replacement parts (if needed) for repairs were ordered; and

d. the date that equipment or replacement parts (if needed) were installed.

(6) The permittee shall maintain monthly records of the following information:

a. the amount of scrap processed each month;

b. the rolling, 12-month summation of the scrap processed; and

c. the rolling, 12-month summation of the PE and PM10 emissions.

(7) The permittee shall maintain the following daily records on each day this emissions unit is in operation:

a. the number of hours the emissions unit was in operation; and

b. the amount of CO2 employed.

(8) The permittee shall observe the pressure gauge on the outlet side of the manifold, as required in b)(2)l, to verify that the CO2 is available for fume suppression at the outlet of the oxygen lance.

(9) The permittee shall record the pressure gauge reading, as required in b)(2)l, in a log book prior to or immediately following commencement of lancing operations for each shift.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. Fugitive PE/PM10 shall not exceed 5.60 tons per rolling, 12-month period.

ii. The permittee shall process no more than 40,000 tons of metal scrap per rolling, 12-month period.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Ohio EPA Northeast District Office).

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director by the due date identified in the Authorization section of this permit. The PER shall cover a

reporting period of no more than 12 months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average from oxygen lance cutting operations.

Applicable Compliance Method:

Compliance with the allowable visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average from oxygen lance material handling operations.

Applicable Compliance Method:

Compliance with the allowable visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

c. Emission Limitation:

PE/PM10 emissions shall not exceed 5.60 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined by multiplying the controlled emission factor of 0.28 lb/hr (supplied by permittee) by the maximum hourly recycled scrap metal of 20 tons per hour.

d. Emission Limitation:

Fugitive PE/PM10 shall not exceed 5.60 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the PE/PM10 emission limitation shall be determined by the following equation:

E = A*B / C

where:

E = maximum annual PE/PM10 emissions rate in tons;

A = annual "recycled scrap" processed based upon the record keeping requirements specified in d)(6) above, in tons/year;

B = controlled emissions factor, 0.28 lb/ton (calculated emission factor by permittee); and

C = 2000 lbs per ton.

g) Miscellaneous Requirements

(1) None.

6. F006, Drop Ball Pit

Operations, Property and/or Equipment Description:

EAF slag ball drop ball with a single crane /drop ball operation and associated material handling

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)(1)(b)	Fugitive particulate emissions (PE) shall not exceed 0.12 lb/hr and 0.12 ton per rolling, 12-month period. Fugitive particulate matter with a diameter less than or equal to 10 microns (PM10) shall not exceed 0.055 lb/hr and 0.055 ton per rolling, 12-month period.
b.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

a. The operation(s) that are covered by this permit and subject to the requirements of b)(1) are listed below:

i. EAF slag drop balling operations; and

ii. material handling operations within the pit (including excavation).

b. The permits shall employ best available control measures for material handling operation(s) for the purpose of ensuring compliance with the applicable requirements of b)(1). The permittee shall implement the following control measure(s) to ensure compliance with the applicable requirements of b)(1):

Material handling operation(s)	Control measure(s)
EAF slag drop balling operations	Use of water spray(s) during the drop balling operation to meet applicable requirements.
Material handling operations within the pit (including excavation)	Use of water sprays to wet during material handling operations to meet the applicable requirements; minimize drop height

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

c. For each operation that is not adequately enclosed, the control measure(s) specified in b)(2)b shall be implemented as needed during operation. If the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that additional control measure(s) is (are) necessary to ensure compliance with the applicable requirements of b)(1), such additional control measures shall be implemented immediately. Any required implementation of the additional control measure(s) shall continue during operation until further observation confirms that use of these additional control measure(s) is unnecessary.

d. Specific additional control measures shall be determined by the permittee. Such additional control measures may include increased water application, use of chemical dust suppressant, or shut-down of operations. The use of additional control measures shall, at all times, comply with all air, surface water, ground water, solid waste, and hazardous waste laws and regulations.

e. Implementation of the control measure(s) specified in b)(2)b in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08(B).

f. All operations identified in b)(2)b associated with the slag drop balling pit shall have water sprays. In the case of failure or malfunction of any individual water spray during use of the pit or any material handling operations associated with the pit, the failure or malfunction shall be reported as described in e)(1)c and e)(1)d.

g. In the event of failure or malfunction of a pump affecting any water delivery location at or within the balling pit, the permittee shall evaluate visible emissions from such affected points upon discovery. Should observations indicate a potential or actual violation of visible emissions limitations, the permittee shall perform one or more of the following until normal control measures are restored:

i. utilize portable water sprays at the affected locations; and

ii. shut down the affected sources until repairs are made.

h. The permittee shall apply water to slag placed within the pit prior to commencing drop balling operations or material handling operations in order to ensure that the material has cooled enough to maintain adequate moisture content. Drop balling or material handling operations shall not be conducted with hot slag or slag that has not been adequately wetted, as determined through Monitoring and Recordkeeping Requirements in d)(1) of this permit.

c) Operational Restrictions

(1) The permittee shall restrict the facility-wide annual EAF slag processed to 300,000 tons per year, based upon a rolling, 12-month summation of the production rates. This is an existing emissions unit which has existing records of the amount of production and, therefore, does not need to be restricted on a monthly basis.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, for operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

Material handling operation(s)	Minimum inspection frequency
EAF slag drop ball pit	Inspect slag for adequate cooling and moisture content prior to commencing any drop-balling operation; monitoring of visible emissions twice per shift during daylight hours.
Material handling operations within the pit (including excavation)	Inspect slag for adequate cooling and moisture content prior to commencing any material handling operations; monitoring of visible emissions twice per shift during daylight hours.

The inspections shall be performed during representative, normal operating conditions.

(2) The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the requirements of b)(1) of this permit.

(3) The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed;

b. the date of each inspection where it was determined that a malfunction occurred in any individual water spray or pump servicing the entire EAF slag drop ball pit and/or associated material handling operations;

c. the date of each inspection where it was determined by the permittee that it was necessary to implement additional control measure(s);

d. the dates that the additional control measure(s) was (were) implemented;

e. a description of the additional controls implemented; and

f. on a calendar quarter basis, the total number of days additional control measure(s) was (were) implemented.

The information in paragraph d)(3)f shall be kept separately for each material handling operation and shall be updated on a quarter basis within 30 days after the end of each calendar quarter.

(4) The permittee shall maintain monthly records of the following information:

a. the amount of EAF slag processed each month;

b. the rolling, 12-month summation of the EAF slag processed; and

c. the rolling, 12-month summation of the PM and PM10 emissions.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. Fugitive PE shall not exceed 0.12 ton per rolling, 12-month period.

ii. Fugitive PM10 shall not exceed 0.055 ton per rolling, 12-month period.

iii. The permittee shall restrict the facility-wide annual EAF slag processed to 300,000 tons per year, based upon a rolling, 12-month summation of the production rates.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Ohio EPA Northeast District Office).

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance with the allowable visible emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

Fugitive PM10 emissions shall not exceed 0.055 lb/hr.

Applicable Compliance Method:

Compliance with the PM10 emission limitation shall be determined by the following equation:

E = (A + B + C)*30

where:

E = PM10 emissions in lb/hr.

A = 0.000409 lb/ton, calculated PM10 EF (controlled) for the "oversized EAF slag dropped into dropball pit" operation, EF using Eq 1 of AP-42, 13.2.4-3 (version 1/95). This EF factor was also used in PTI # 02-13973 (issued on June 5, 2001).

B = 0.000590 lb/ton, calculated PM10 EF (controlled) for the "dropball EAF slag" operation, EF from AP-42, Table 11.19.2-2, 1/95 (Tertiary crushing).

C = 0.000819 lb/ton, calculated PM10 EF (controlled) for the "sized EAF slag loaded to EAF slag trucks" operations, using Eq 1 of AP-42, 13.2.4-3 (version 1/95). This EF factor was also used in PTI # 02-13973 (issued on June 5, 2001).

30 = maximum process weight rate in tons per hour.

c. Emission Limitation:

Fugitive PM10 emissions shall not exceed 0.055 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the PM10 emission limitation shall be determined by the following equation

E = (A + B + C)*D / F

where:

E = PM10 emissions in lb/hr.

A = 0.000409 lb/ton, calculated PM10 EF (controlled) for the "oversized EAF slag dropped into dropball pit" operation, EF using Eq 1 of AP-42, 13.2.4-3 (version 1/95). This EF factor was also used in PTI # 02-13973 (issued on June 5, 2001).

B = 0.000590 lb/ton, calculated PM10 EF (controlled) for the "dropball EAF slag" operation, EF from AP-42, Table 11.19.2-2, 1/95 (Tertiary crushing).

C = 0.000819 lb/ton, calculated EF (controlled) for the "sized EAF slag loaded to EAF slag trucks" operations, using Eq 1 of AP-42, 13.2.4-3 (version 1/95). This EF factor was also used in PTI # 02-13973 (issued on June 5, 2001).

D = annual "EAF slag" processed based upon the record keeping requirements specified in d)(4) above, in tons/year.

F = 2000 lbs per ton.

d. Emission Limitation:

Fugitive PE shall not exceed 0.12 lb/hr.

Applicable Compliance Method:

Compliance with the PE emission limitation shall be determined by the following equation:

E = (A + B + C)*30

where:

E = PE emissions in lb/hr.

A = 0.000866 lb/ton, calculated particulate EF (controlled) for the "oversized EAF slag dropped into dropball pit" operation, EF using Eq 1 of AP-42, 13.2.4-3 (version 1/95). This EF factor was also used in PTI # 02-13973 (issued on June 5, 2001).

B = 0.001239 lb/ton, calculated particulate EF (controlled) for the "dropball EAF slag" operation, EF from AP-42, Table 11.19.2-2, 1/95 (Tertiary crushing).

C = 0.001732 lb/ton, calculated particulate EF (controlled) for the "sized EAF slag loaded to EAF slag trucks" operations, using Eq 1 of AP-42, 13.2.4-3 (version 1/95). This EF factor was also used in PTI # 02-13973 (issued on June 5, 2001).

30 = maximum process weight rate in tons per hour.

e. Emission Limitation:

Fugitive PE shall not exceed 0.12 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the PE emission limitation shall be determined by the following equation:

E = (A + B + C)*D / F

where:

E = PE emissions in lb/hr.

A = 0.000409 lb/ton, calculated particulate EF (controlled) for the "oversized EAF slag dropped into dropball pit" operation, EF using Eq 1 of AP-42, 13.2.4-3 (version 1/95). This EF factor was also used in PTI # 02-13973 (issued on June 5, 2001).

B = 0.000590 lb/ton, calculated particulate EF (controlled) for the "dropball EAF slag" operation, EF from AP-42, Table 11.19.2-2, 1/95 (Tertiary crushing).

C = 0.000819 lb/ton, calculated particulate EF (controlled) for the "sized EAF slag loaded to EAF slag trucks" operations, using Eq 1 of AP-42, 13.2.4-3 (version 1/95). This EF factor was also used in PTI # 02-13973 (issued on June 5, 2001).

D = annual "EAF slag" processed based upon the record keeping requirements specified in d)(4) above, in tons/year.

F = 2000 lbs per ton.

g) Miscellaneous Requirements

(1) None.