



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

3/8/2011

Doug Schaefer
Fe X Processing, LLC
200 corporate Center Drive, Suite 330
Moon Township, PA 15108

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0641095003
Permit Number: P0107649
Permit Type: Initial Installation
County: Jefferson

Certified Mail

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

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 Josh Mandel," 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, Southeast District Office at (740)385-8501 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, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-SEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Fe X Processing, LLC**

Facility ID:	0641095003
Permit Number:	P0107649
Permit Type:	Initial Installation
Issued:	3/8/2011
Effective:	3/8/2011
Expiration:	3/8/2021



Division of Air Pollution Control
Permit-to-Install and Operate

for
Fe X Processing, LLC

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Authorization

Facility ID: 0641095003
Application Number(s): A0041299
Permit Number: P0107649
Permit Description: Initial installation of scrap metal recovery operation including two 100 TPH scrap metal recovery plants with associated crushing, screening, and material handling activities (F003 and F004).
Permit Type: Initial Installation
Permit Fee: \$2,500.00
Issue Date: 3/8/2011
Effective Date: 3/8/2011
Expiration Date: 3/8/2021
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

Fe X Processing, LLC
2200 Commercial Avenue
Mingo Junction, OH 43938

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

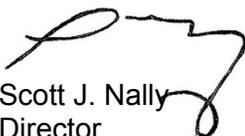
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

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


Scott J. Nally
Director

Authorization (continued)

Permit Number: P0107649
Permit Description: Initial installation of scrap metal recovery operation including two 100 TPH scrap metal recovery plants with associated crushing, screening, and material handling activities (F003 and F004).

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

Emissions Unit ID:	F003
Company Equipment ID:	Plant #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F004
Company Equipment ID:	Plant #2
Superseded Permit Number:	
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, Southeast 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 submitting¹ 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.

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.

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).

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. F003, Scrap Metal Recovery Plant #1

Operations, Property and/or Equipment Description:

100 TPH scrap metal recovery plant controlled by wet suppression (consisting of one hopper, six conveyors, two screens- primary CEC Screen-IT and secondary double deck screen, 4033 hammer mill with magnetic separation, and material handling operations); maximum annual throughput of 876,000 tons per year.

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 operation(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 are identified below. 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), as effective 11/30/01	Fugitive particulate emissions (PE) shall not exceed 7.36 tons per year. There shall be no visible PE except for one minute during any 60-minute period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)c. through b)(2)f. below). See b)(2)a. below
b.	OAC rule 3745-31-05(E), as effective 12/01/06	See b)(2)b. below.
c.	OAC rule 3745-17-07(B)(1)	Visible PE from fugitive dust shall not exceed 20% opacity as a three-minute average.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		This emission limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.
d.	OAC rules 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)c. through b)(2)f. below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.
- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Permit to Install and Operate P0107649 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements for fugitive PE under OAC rule 3745-31-05(A)(3):

- i. maintain inherent moisture through the use of wet suppression and minimize drop height to achieve 50% control efficiency from hopper load-in and 90% control efficiency from all other operations.
- ii. 7.36 TPY limit for fugitive PE.
- c. The slag metal recovery plant operations that are covered by this permit and subject to the above-mentioned requirements are listed below:



Material Handling/Transfer Points

Load-in to hopper
Conveyor/material handling transfer points (15)

Equipment

Primary CEC Screen-It
Secondary double deck screen
4033 Hammermill

- d. The permittee shall employ best/reasonably available control measures for the material handling operations listed above, for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to minimize drop height and maintain sufficient moisture content of the material, using water sprays as necessary, to maintain compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- e. For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures is unnecessary.
- f. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05 and/or 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

<u>Slag metal recovery operation(s)</u>	<u>minimum inspection frequency</u>
Load in to hopper	daily
Conveyor/material handling transfer points (15)	daily

Equipment

Primary CEC Screen-It	daily
Secondary double deck screen	daily
4033 Hammermill	daily

- (2) The above-mentioned inspections shall be performed during representative, normal operating conditions.
- (3) For material handling operations, 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 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.

The information in d)(3)d. shall be kept separately for each material handling operation identified above, 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 permit evaluation report 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) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
Fugitive PE shall not exceed 7.36 tons per year.

Applicable Compliance Method:

Compliance with the tons per year emission limitation shall be demonstrated by the following one-time calculation based on the emission factors in AP-42 Section 13.2.4 (11/06) for hopper load-in and AP-42 Section 11.19.2 (8/04) for crushing, screening, fines screening, and conveyor transfer points, and the maximum annual throughput of 876,000 TPY:

$$\text{Fugitive PE} = \frac{[(\# \text{ load-in points})(\text{maximum annual throughput})(\text{hopper load-in EF})(1-0.50)] + [(\# \text{ crushers})(\text{maximum annual throughput})(\text{crushing EF (controlled)})] + [(\# \text{ screens})(\text{maximum annual throughput})(\text{screening EF (controlled)})] + [(\# \text{ fines screens})(\text{maximum annual throughput})(\text{fines screening EF (controlled)})] + [(\# \text{ conveyor transfer points})(\text{maximum annual throughput})(\text{transfer EF (controlled)})]}{2,000 \text{ lbs/ton}}$$



$$= \frac{[(1)(876,000 \text{ tons/yr})(0.015387 \text{ lb/ton})(1-0.50)] + [(1)(876,000 \text{ tons/yr})(0.0012 \text{ lb/ton})] + [(1)(876,000 \text{ tons/yr})(0.0022 \text{ lb/ton})] + [(1)(876,000 \text{ tons/yr})(0.0036 \text{ lb/ton})] + [(15)(876,000 \text{ tons/yr})(0.00014 \text{ lb/ton})]}{2,000 \text{ lbs/ton}}$$

$$= 7.36 \text{ tons per year}$$

Where:

$$E \text{ (hopper load-in)} = k (0.0032)[(U/5)^{1.3}/(M/2)^{1.4}]$$

E = emission factor expressed in pounds per ton

k = particle size multiplier for TSP (dimensionless) = 0.74

U = mean wind speed expressed in miles per hour (MPH) = 10

M = material moisture content (%) = 1

Control efficiency = 50% (for watering, RACM Table 2.1.3-3)

Therefore, E (hopper load-in) = 0.015387 lb PE/ton

b. Emissions Limitation:

There shall be no visible PE except for one minute during any 60-minute period.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 22.

c. Emissions Limitation:

Visible PE from fugitive dust shall not exceed 20% opacity as a three-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

g) Miscellaneous Requirements

- (1) None.



2. F004, Scrap Metal Recovery Plant #2

Operations, Property and/or Equipment Description:

100 TPH scrap metal recovery plant controlled with wet suppression (consisting of one hopper, four conveyors, two screens- primary Screen Machine and secondary screen, VSI Impactor with magnetic separation, and material handling operations); maximum annual throughput of 876,000 tons per year.

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 operation(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 are identified below. 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), as effective 11/30/01	Fugitive particulate emissions (PE) shall not exceed 7.23 tons per year. There shall be no visible PE except for one minute during any 60-minute period. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)c. through b)(2)f. below). See b)(2)a. below.
b.	OAC rule 3745-31-05(E), as effective 12/01/06	See b)(2)b. below.
c.	OAC rule 3745-17-07(B)(1)	Visible PE from fugitive dust shall not exceed 20% opacity as a three-minute average.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		This emission limitation is less stringent than the limitation listed under OAC rule 3745-31-05(A)(3), until such time as U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.
d.	OAC rules 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See b)(2)c. through b)(2)f. below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Permit to Install and Operate P0107649 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements for fugitive PE under OAC rule 3745-31-05(A)(3):

- i. maintain inherent moisture through the use of wet suppression and minimize drop height to achieve 50% control efficiency from hopper load-in and 90% control efficiency from all other operations.
- ii. 7.23 TPY limit for fugitive PE.
- c. The slag metal recovery plant operations that are covered by this permit and subject to the above-mentioned requirements are listed below:



Material Handling/Transfer Points

Load-in to hopper
Conveyor/material handling transfer points (13)

Equipment

Primary Screen Machine
Secondary screen
VSI Impactor

- d. The permittee shall employ best/reasonably available control measures for the material handling operations listed above, for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to minimize drop height and maintain sufficient moisture content of the material, using water sprays as necessary, to maintain compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- e. For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures is unnecessary.
- f. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05 and/or 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

<u>Slag metal recovery operation(s)</u>	<u>minimum inspection frequency</u>
Load in to hopper	daily
Conveyor/material handling transfer points (13)	daily

Equipment

Primary Screen Machine	daily
Secondary screen	daily
VSI Impactor	daily

- (2) The above-mentioned inspections shall be performed during representative, normal operating conditions.
- (3) For material handling operations, 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 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.

The information in d)(3)d. shall be kept separately for each material handling operation identified above, 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 permit evaluation report 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) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emissions Limitation:
Fugitive PE shall not exceed 6.93 tons per year.

Applicable Compliance Method:

Compliance with the tons per year emission limitation shall be demonstrated by the following one-time calculation based on the emission factors in AP-42 Section 13.2.4 (11/06) for hopper load-in and AP-42 Section 11.19.2 (8/04) for crushing, screening, fines screening, and conveyor transfer points, and the maximum annual throughput of 876,000 TPY:

$$\text{Fugitive PE} = \frac{[(\# \text{ load-in points})(\text{maximum annual throughput})(\text{hopper load-in EF})(1-0.50)] + [(\# \text{ crushers})(\text{maximum annual throughput})(\text{crushing EF (controlled)})] + [(\# \text{ screens})(\text{maximum annual throughput})(\text{screening EF (controlled)})] + [(\# \text{ fines screens})(\text{maximum annual throughput})(\text{fines screening EF (controlled)})] + [(\# \text{ conveyor transfer points})(\text{maximum annual throughput})(\text{transfer EF (controlled)})]}{2,000 \text{ lbs/ton}}$$

$$= \frac{[(1)(876,000 \text{ tons/yr})(0.015387 \text{ lb/ton})(1-0.50)] + [(1)(876,000 \text{ tons/yr})(0.0012 \text{ lb/ton})] + [(1)(876,000 \text{ tons/yr})(0.0022 \text{ lb/ton})] + [(1)(876,000 \text{ tons/yr})(0.0036 \text{ lb/ton})] + [(13)(876,000 \text{ tons/yr})(0.00014 \text{ lb/ton})]}{2,000 \text{ lbs/ton}}$$

$$= 7.23 \text{ tons per year}$$

Where:

$$E \text{ (hopper load-in)} = k (0.0032)[(U/5)^{1.3}/(M/2)^{1.4}]$$

E = emission factor expressed in pounds per ton

k = particle size multiplier for TSP (dimensionless) = 0.74

U = mean wind speed expressed in miles per hour (MPH) = 10

M = material moisture content (%) = 1

Control efficiency = 50% (for watering, RACM Table 2.1.3-3)

Therefore, E (hopper load-in) = 0.015387 lb PE/ton

b. Emissions Limitation:

There shall be no visible PE except for one minute during any 60-minute period.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 22.

c. Emissions Limitation:

Visible PE from fugitive dust shall not exceed 20% opacity as a three-minute average.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

g) Miscellaneous Requirements

- (1) None.