



Environmental
Protection Agency

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

8/25/2010

Michael Connolly
Tube City IMS - AK
1155 Business Center Dr
Horsham, PA 19044

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1409010908
Permit Number: P0105140
Permit Type: Renewal
County: Butler

Certified Mail

| | |
|-----|------------------------------------|
| No | TOXIC REVIEW |
| No | PSD |
| No | 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) |

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Journal News. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Hamilton County Dept. of Environmental Services at (513)946-7777.

Sincerely,


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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
HCDOES; Indiana; Kentucky



Permit Strategy Write-Up

1. Check all that apply:

- Synthetic Minor Determination
- Netting Determination

2. Source Description:

This facility processes slag which is generated during AK Steel's iron and steel making process. The facility consists of various operations, including crushers, screens, and conveyors, slag dumping operations, storage piles, and plant roadways.

3. Facility Emissions and Attainment Status:

Butler County is currently non-attainment for PM2.5 and attainment for all other criteria pollutants. The facility emits PM and PM10 from it various operations. The total facility emissions are identified below.

4. Source Emissions:

The emissions for each operation/emissions unit is identified in the terms and conditions of the permit.

5. Conclusion:

The permittee has requested federally enforceable production limitations to restrict the facility emissions.

6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

| <u>Pollutant</u> | <u>Tons Per Year</u> |
|------------------|----------------------|
| <u>PM</u> | <u>79.81</u> |
| <u>PM10</u> | <u>36</u> |

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
Tube City IMS - AK

Issue Date: 8/25/2010
Permit Number: P0105140
Permit Type: Renewal
Permit Description: FEPTIO renewal for emissions units.
Facility ID: 1409010908
Facility Location: Tube City IMS - AK
3024 Oxford State Rd,
Middletown, OH 45044
Facility Description: Materials Recovery Facilities

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Paul Tedtman at Hamilton County Dept. of Environmental Services, 250 William Howard Taft Pkwy., Cincinnati, OH 45219-2660 or (513)946-7777. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio

**Environmental
Protection Agency**

DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Tube City IMS - AK**

Facility ID: 1409010908
Permit Number: P0105140
Permit Type: Renewal
Issued: 8/25/2010
Effective: To be entered upon final issuance
Expiration: To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install and Operate
for
Tube City IMS - AK

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Authorization

Facility ID: 1409010908
Application Number(s): A0037805, A0039574
Permit Number: P0105140
Permit Description: FEPTIO renewal for emissions units.
Permit Type: Renewal
Permit Fee: \$0.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 8/25/2010
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Tube City IMS - AK
3024 Oxford State Rd
Middletown, OH 45044

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:

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

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: P0105140
Permit Description: FEPTIO renewal for emissions units.

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: | BOF Slag Processing Plant |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | F002 |
| Company Equipment ID: | BF Slag Processing Plant |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | F003 |
| Company Equipment ID: | Tundish Lancing |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | F004 |
| Company Equipment ID: | Mill Scale/Kish Processing Plant |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | F005 |
| Company Equipment ID: | BF Slag Dumping Pits |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | F006 |
| Company Equipment ID: | BOF Slag Pot Dumping Station |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | F007 |
| Company Equipment ID: | Kish Dumping Station |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | F008 |
| Company Equipment ID: | Drop Ball Pit |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | F009 |
| Company Equipment ID: | Unprocessed Slag and Product Storage Piles |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | F010 |
| Company Equipment ID: | Roadways and Parking |
| 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

Effective Date: To be entered upon final issuance

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 Hamilton County Dept. of Environmental Services 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.

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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.

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.

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).

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, BOF Slag Processing Plant

Operations, Property and/or Equipment Description:

Modification of BOF slag processing plant a new cone crusher and conveyor are being added to the process

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. b)(1)b., c)(2), d)(2), and e)(3).

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) | Particulate Emissions (PE) shall not exceed 3.43 pounds per hour. Particulate Emissions 10 microns and less in diameter (PM-10) shall not exceed 1.26 pounds per hour. See b)(1)b., b)(2)b., b)(2)c., and c)(1). |
| b. | OAC rule 3745-31-05(D) | Particulate Emissions (PE) shall not exceed 2.27 TPY based on a rolling 12-month summation. Particulate Emissions 10 microns and less in diameter (PM-10) shall not exceed 0.84 TPY based on a rolling 12-month summation. See c)(2). |
| c. | OAC rule 3745-17-07(B) | The visible emission limitation specified by this rule is less stringent than the |



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

(2) Additional Terms and Conditions

- a. The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:
 - i. All conveyors in the BOF slag processing plant and associated transfer points.
 - ii. All radial stacking conveyor drop points.
 - iii. Vibrating grizzly feeder.
 - iv. Single, double and triple deck screens.
 - v. Railcar and truck loading.
 - vi. Crusher and associated conveyors.
- b. Visible particulate emissions from any crusher, feeder, screen, conveyor or transfer point shall not exceed 10 percent opacity, as a six-minute average.
- c. The permittee shall employ best available control measures for the above-identified material handling operation(s) 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 perform the following control measure(s) to ensure compliance:

Material handling operation(s)

Control measure(s)

Vibrating Grizzly Feeder

Use of a dedicated water spray when not raining for the grizzly feeder such that the applied water either by the use of the dedicated water spray and/or rain conditions wet the slag feed material to ensure that the applied water meets the visible emission limitation.

Minimize front end loader bucket-to-feeder drop height.

All Screens

Use of a dedicated water spray when not raining at each screen such that the applied water either by the use of the dedicated water spray and/or rain conditions meets the visible emission



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Minimize drop height.

All Crushers

Use of a dedicated water spray when not raining at the crushers such that the applied water either by the use of the dedicated water spray and/or rain conditions meets the visible emission limitation.

Minimize drop height.

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

- d. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the daily checks conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- e. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by using water sprays at each feeder, screen and crusher, the production limitation and compliance with the mass and visible emission limitations specified above.
- f. The hourly emission limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.

c) Operational Restrictions

- (1) All feeders, screens and crusher identified in b)(2)c. above within the processing plant shall be equipped with a dedicated water spray.
- (2) The maximum annual production rate for this emissions unit shall not exceed 795,000 tons per year, based upon a rolling, 12-month summation of the production rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, for all screen, grizzly feeder and crusher material handling operations that are not adequately enclosed, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., any feeder, crusher or screen, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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- a. The location and color of the emissions;
 - b. Whether the emissions are representative of normal operations;
 - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. The total duration of any visible emission incident; and
 - e. Any corrective actions taken to minimize or eliminate the visible emissions.
- (2) The permittee shall maintain monthly records of the following information:
- a. The production rate for each month.
 - b. The rolling, 12-month summation of the production rates.
 - c. The monthly PE and PM10 emissions.
 - d. The rolling, 12-month summation of the PE and PM10 emissions in TPY.
- 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.
 - (2) The permittee shall include in the PER the following: (a) identify all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., any crusher, screen, feeder, conveyor or transfer point, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible emissions.
 - (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation in c)(2) and/or rolling, 12-month PE and PM10 emission limitation in b)(1)b.
- 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 appropriate District Office or local air agency).
- f) Testing Requirements
- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Particulate Emissions (PE) shall not exceed 3.43 pounds per hour.

Particulate Emissions 10 microns and less in diameter (PM-10) shall not exceed 1.26 pounds per hour.

Applicable Compliance Method:

The hourly emissions were determined by multiplying the emission factors below by the maximum hourly production rate for the identified piece of equipment (see PTIO application submitted 06/14/2010).

Conveyor transfer points = 0.0000460 lb of PM-10/ton of material processed,
0.00014 lb of PM/ton of material processed
(Based on AP-42, Table 11.19.2-2, 8/04).

Feeder loading = 0.000531 lb of PM-10/ton of material processed,
0.001122 lb of PM/ton of material processed
(Based on AP-42, Section 13.2.4.3, 1/95, U = 7.17
mph, M = 0.92%, 90% control for watering)

Screening = 0.00074 lb of PM-10/ton of material processed,
0.0022 lb of PM/ton of material processed (Based
on AP-42, Table 11.19.2-2, 8/04).

Crusher = 0.00054 lb of PM-10/ton of material processed,
0.0012 lb of PM/ton of material processed (Based
on AP-42, Table 11.19.2-2, 8/04).

b. Emission Limitation:

Particulate Emissions (PE) shall not exceed 2.27 TPY based on a rolling 12-month summation.

Particulate Emissions 10 microns and less in diameter (PM-10) shall not exceed 0.84 TPY based on a rolling 12-month summation.

Applicable Compliance Method:

The annual emissions were determined by multiplying the emission factors below by the maximum annual production rate for the identified piece of equipment (see PTIO application submitted 06/14/2010).

Conveyor transfer points = 0.0000460 lb of PM-10/ton of material processed,
0.00014 lb of PM/ton of material processed
(Based on AP-42, Table 11.19.2-2, 8/04).

Feeder loading = 0.000531 lb of PM-10/ton of material processed,
0.001122 lb of PM/ton of material processed
(Based on AP-42, Section 13.2.4.3, 1/95, U = 7.17
mph, M = 0.92%, 90% control for watering)

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Screening = 0.00074 lb of PM-10/ton of material processed,
0.0022 lb of PM/ton of material processed (Based
on AP-42, Table 11.19.2-2, 8/04).

Crusher = 0.00054 lb of PM-10/ton material processed,
0.0012 lb of PM/ton material processed (Based on
AP-42, Table 11.19.2-2, 8/04).

c. Emission Limitation:

Visible particulate emissions from any crusher, feeder, screen, conveyor or transfer point shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations shall be determined by Method 9, 40 CFR Part 60 Appendix A.

- (2) Compliance with the production rate limitation in c)(2) shall be demonstrated by the recordkeeping requirements in d)(2).

g) Miscellaneous Requirements

- (1) None.



2. F002, BF Slag Processing Plant

Operations, Property and/or Equipment Description:

BF Slag Processing Plant

- 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. b)(1)b., c)(2), d)(2), and e)(3).
- 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), as effective 11/30/01 | <p>Particulate Emissions (PE) shall not exceed 4.01 pounds per hour.</p> <p>Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 1.43 pounds per hour.</p> <p>See b)(1)b., b)(2)b., b)(2)c., b)(2)g., and c)(1).</p> |
| b. | OAC rule 3745-31-05(D) | <p>Particulate Emissions (PE) shall not exceed 5.12 TPY based on a rolling 12-month summation.</p> <p>Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 1.83 TPY based on a rolling 12-month summation.</p> <p>See c)(2).</p> |
| c. | OAC rule 3745-17-07(B) | Visible particulate emissions from this emissions unit shall not exceed 20 |



| | | |
|----|---|---|
| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
| | | percent opacity, as a three -minute average. |
| d. | OAC rule 3745-17-08(B) | See b)(2)c. |
| e. | OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06 | See b)(2)h. |

(2) Additional Terms and Conditions

- a. The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:
 - i. All conveyors in the BF slag processing plant and associated transfer points.
 - ii. Vibrating grizzly feeder.
 - iii. Crushers and associated conveyors.
 - iv. All screens
- b. Visible particulate emissions from any crusher, feeder, screen, conveyor, or transfer point shall not exceed 10 percent opacity, as a six-minute average.
- c. The permittee shall employ best available control measures for the above-identified material handling operation(s) 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 perform the following control measure(s) to ensure compliance:

Material handling operation(s)

Control measure(s)

Vibrating Grizzly Feeder

Use of a dedicated water spray when not raining for the grizzly feeder such that the applied water either by the use of the dedicated water spray and/or rain conditions wet the slag feed material to ensure that the applied water meets the visible emission limitation.

Minimize front end loader bucket-to-feeder drop height.

All Screens

Use of a dedicated water spray when not raining at each screen such that the applied water either by the use of the dedicated water spray and/or rain conditions meets the visible emission limitation.

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Minimize drop height.

All Crushers

Use of a dedicated water spray when not raining at the crusher such that the applied water either by the use of the dedicated water spray and/or rain conditions meets the visible emission limitation.

Minimize drop height.

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

- d. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the daily checks conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- e. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by using water sprays at each feeder, screen and crusher, the production limitation and compliance with the visible emission limitations specified above.
- f. The hourly emission limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.
- g. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (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 the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) 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 requirement 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 OAC rule 3745-31-05, then these emission limitations/control measures no longer apply along with the visible particulate emissions limitation in b)(2)b.
- h. 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. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE and PM10 emissions and the visible particulate emissions limitation established in b)(2)b. from this air contaminant source since the

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calculated annual emissions rate is less than 10 tons per year taking into account
the federally enforceable production limit in c)(2).

- c) Operational Restrictions
- (1) All feeders, screens and crushers identified in b)(2)c. above within the processing plant shall be equipped with a dedicated water spray.
 - (2) The maximum annual production rate for this emissions unit shall not exceed 1,276,273 tons per year, based upon a rolling, 12-month summation of the production rates.
- d) Monitoring and/or Recordkeeping Requirements
- (1) Except as otherwise provided in this section, for all screen, grizzly feeder and crusher material handling operations that are not adequately enclosed, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., any feeder, crusher or screen, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. The location and color of the emissions;
 - b. Whether the emissions are representative of normal operations;
 - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. The total duration of any visible emission incident; and
 - e. Any corrective actions taken to minimize or eliminate the visible emissions.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. The production rate for each month.
 - b. The rolling, 12-month summation of the production rates.
 - c. The monthly PE and PM10 emissions.
 - d. The rolling, 12-month summation of the PE and PM10 emissions in TPY.
- 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.
 - (2) The permittee shall include in the PER the following: (a) identify all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., any



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crusher, screen, feeder, conveyor or transfer point, etc.) serving this emissions unit and
(b) describe any corrective actions taken to minimize or eliminate the visible emissions.

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation in term c)(2) and/or rolling, 12-month PE and PM10 emission limitation in b)(1)b.

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 appropriate District Office or local air agency).

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Particulate Emissions (PE) shall not exceed 4.01 pounds per hour.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 1.43 pounds per hour.

Applicable Compliance Method:

The hourly emissions were determined by multiplying the emission factors below by the maximum hourly production rate for the identified piece of equipment (see PTIO application submitted 06/14/2010).

Conveyor transfer points = 0.0000460 lb of PM-10/ton of material processed,
0.00014 lb of PM/ton of material processed
(Based on AP-42, Table 11.19.2-2, 8/04).

Feeder loading = 0.000531 lb of PM-10/ton of material processed,
0.001122 lb of PM/ton of material processed
(Based on AP-42, Section 13.2.4.3, 1/95, U = 7.17 mph, M = 0.92%, 90% control for watering)

Screening = 0.00074 lb of PM-10/ton of material processed,
0.0022 lb of PM/ton of material processed (Based on AP-42, Table 11.19.2-2, 8/04).

Crusher = 0.00054 lb of PM-10/ton of material processed,
0.0012 lb of PM/ton of material processed (Based on AP-42, Table 11.19.2-2, 8/04).



b. Emission Limitation:

Particulate Emissions (PE) shall not exceed 5.12 TPY based on a rolling 12-month summation.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 1.83 TPY based on a rolling 12-month summation.

Applicable Compliance Method:

The annual emissions were determined by multiplying the emission factors below by the maximum annual production rate for the identified piece of equipment (see PTIO application submitted 06/14/2010).

Conveyor transfer points = 0.0000460 lb of PM-10/ton of material processed, 0.00014 lb of PM/ton of material processed (Based on AP-42, Table 11.19.2-2, 8/04).

Feeder loading = 0.000531 lb of PM-10/ton of material processed, 0.001122 lb of PM/ton of material processed (Based on AP-42, Section 13.2.4.3, 1/95, U = 7.17 mph, M = 0.92%, 90% control for watering)

Screening = 0.00074 lb of PM-10/ton of material processed, 0.0022 lb of PM/ton of material processed (Based on AP-42, Table 11.19.2-2, 8/04).

Crusher = 0.00054 lb of PM-10/ton of material processed, 0.0012 lb of PM/ton of material processed (Based on AP-42, Table 11.19.2-2, 8/04).

c. Emission Limitations:

Visible particulate emissions from any crusher, feeder, screen, conveyor or transfer point shall not exceed 10 percent opacity, as a six-minute average.

Visible particulate emissions from any crusher, feeder, screen, conveyor or transfer point shall not exceed 20 percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations shall be determined by Method 9, 40 CFR Part 60 Appendix A.

(2) Compliance with the production rate limitation in c)(2) shall be demonstrated by the recordkeeping requirements in d)(2).

g) Miscellaneous Requirements

(1) None.



3. F003, Tundish Lancing

Operations, Property and/or Equipment Description:

Oxygen lancing operation (2 lancing stations) with carbon dioxide shielding

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. b)(1)b., c)(1), d)(1), and e)(3).

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) | Particulate Emissions (PE) shall not exceed 13.1 pounds per hour. Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 12.71 pounds per hour. See b)(1)b., b)(2)a., and b)(2)b . |
| b. | OAC rule 3745-31-05(D) | Particulate Emissions (PE) shall not exceed 3.28 TPY based upon a rolling, 12-month summation. Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 3.18 TPY based upon a rolling, 12-month summation. See c)(1). |
| c. | OAC rule 3745-17-07(B)(1) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC |



| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|----|-------------------------------|---|
| | | rule 3745-31-05(A)(3). |
| d. | OAC rule 3745-17-08(B) | See b)(2)b. |

(2) Additional Terms and Conditions

- a. Visible particulate emissions from this emissions unit shall not exceed 10 percent opacity, as a three-minute average.
- b. The permittee shall employ carbon dioxide shielding at all times the oxygen lancing torch is in operation to minimize or eliminate the visible emissions of fugitive dust.
- c. The hourly emission limitations specified above are based upon the emissions unit's potentials to emit. Therefore, no hourly records are required to demonstrate compliance with these limits.

c) Operational Restrictions

- (1) The maximum amount of tundish lanced for the emissions unit shall not exceed 10,000 tons per year based upon a rolling, 12-month summation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following:
 - a. The amount of tundish lanced, in tons; and
 - b. The rolling, 12-month summation of the monthly amounts of tundish lanced.
 - c. The monthly PE and PM10 emissions.
 - d. The rolling, 12-month summation of the PE and PM10 emissions in TPY.
- (2) The permittee shall maintain the following daily records for each day this emissions unit is in operation:
 - a. The number of hours the emissions unit was in operation;
 - b. Whether or not the carbon dioxide shielding was being employed at all times during oxygen lancing; and
 - c. The amount of carbon dioxide used.
- (3) Except as otherwise provided in this section, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. The location and color of the emissions;



- b. Whether the emissions are representative of normal operations;
- c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. The total duration of any visible emission incident; and
- e. Any corrective actions taken to minimize or eliminate the visible emissions.

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.
- (2) The permittee shall include in the PER the following: (a) identify all days during which any visible emissions of fugitive dust were observed from the egress points serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible emissions.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation in c)(1) and/or rolling, 12-month PE and PM10 emission limitation in b)(1)b.

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 appropriate District Office or local air agency).

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Particulate Emissions (PE) shall not exceed 13.1 pounds per hour.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 12.71 pounds per hour.

Applicable Compliance Method:

Compliance with the PM emission limitations shall be based on the maximum amount of tundish processed times the emission factor of 0.42 lb of PM/ton of

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tundish lanced plus 42.0 lb of PM/ton times the amount of burn bar used (see PTIO application submitted 06/14/2010).

Compliance with the PM10 emission limitations shall be based on the maximum amount of tundish processed times the emission factor of 0.41 lb of PM10 /ton of tundish lanced plus 40.7 lb of PM10/ton times the amount of burn bar used (see PTIO application submitted 06/14/2010).

b. Emission Limitation:

Particulate Emissions (PE) shall not exceed 3.28 TPY based upon a rolling, 12-month summation.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 3.18 TPY based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the PM emission limitations shall be based on the maximum amount of tundish processed times the emission factor of 0.42 lb of PM /ton of tundish lanced plus 42.0 lb of PM/ton times the amount of burn bar used (see PTIO application submitted 06/14/2010).

Compliance with the PM10 emission limitations shall be based on the maximum amount of tundish processed times the emission factor of 0.41 lb of PM10/ton of tundish lanced plus 40.7 lb of PM10/ton times the amount of burn bar used (see PTIO application submitted 06/14/2010).

c. Emission Limitation:

Visible particulate emissions from this emissions unit shall not exceed 10 percent opacity, as a three-minute average.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations shall be determined by Method 9, 40 CFR Part 60 Appendix A.

- (2) Compliance with the tundish lanced limitation in c)(1) shall be determined by the record keeping in d)(1).

g) Miscellaneous Requirements

- (1) None.



4. F004, Auxiliary Plant

Operations, Property and/or Equipment Description:

Auxiliary Plant

- 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. b)(1)b., c)(1), d(2), and e)(2).
- 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) | <p>Particulate Emissions (PE) shall not exceed 1.55 pounds per hour.</p> <p>Particulate Emissions 10 microns and less in diameter shall not exceed 0.56 pound per hour.</p> <p>See b)(1)b., b)(2)b. and b)(2)c.</p> |
| b. | OAC rule 3745-31-05(D) | <p>Particulate Emissions (PE) shall not exceed 1.13 TPY based upon a rolling, 12-month summation.</p> <p>Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 0.41 TPY based upon a rolling, 12-month summation</p> <p>See c)(1).</p> |
| c. | OAC rule 3745-17-07(B)(1) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC |



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

(2) Additional Terms and Conditions

- a. The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:
 - i. All conveyors and chute(s) in the auxiliary processing plant and associated transfer points.
 - ii. Vibrating grizzly feeder.
 - iii. All screens
- b. Visible particulate emissions from any feeder, screen, chute, conveyor, or transfer point shall not exceed 10 percent opacity, as a six-minute average.
- c. The permittee shall employ best available control measures for the above-identified material handling operation(s) 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 perform the following control measure(s) to ensure compliance:

Material handling operation(s)

Control measure(s)

Vibrating Grizzly Feeder

Use of a dedicated water spray when not raining for the grizzly feeder such that the applied water either by the use of the dedicated water spray and/or rain conditions wet the slag feed material to ensure that the applied water meets the visible emission limitation.

Minimize front end loader bucket-to-feeder drop height.

All Screens

Use of a dedicated water spray when not raining at each screen such that the applied water either by the use of the dedicated water spray and/or rain conditions meets the visible emission limitation.

Minimize drop height.

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

- d. The hourly emission limitations outlined above are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limits.
 - e. For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the daily checks conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- c) Operational Restrictions
- (1) The maximum amount of material processed in this emissions unit shall not exceed 440,000 tons per year as a rolling, 12-month summation.
- d) Monitoring and/or Recordkeeping Requirements
- (1) Except as otherwise provided in this section, for all screens and grizzly feeder material handling operations that are not adequately enclosed, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., any feeder, crusher or screen, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. The location and color of the emissions;
 - b. Whether the emissions are representative of normal operations;
 - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. The total duration of any visible emission incident; and
 - e. Any corrective actions taken to minimize or eliminate the visible emissions.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. The production rate for each month.
 - b. The rolling, 12-month summation of the production rates.
 - c. The monthly PE and PM10 emissions.
 - d. The rolling, 12-month summation of the PE and PM10 emissions in TPY.

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.
- (2) The permittee shall include in the PER the following: (a) identify all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., any screen, feeder, conveyor or transfer point, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible emissions.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation in c)(1) and/or rolling, 12-month PE and PM10 emission limitation in b)(1)b.

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 appropriate District Office or local air agency).

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitations:

Particulate Emissions (PE) shall not exceed 1.55 pounds per hour.

Particulate Emissions 10 microns and less in diameter shall not exceed 0.56 pound per hour.

Applicable Compliance Method:

The hourly emissions were determined by multiplying the emission factors below by the maximum hourly production rate for the identified piece of equipment (see PTIO application submitted 06/14/2010).

Conveyor transfer points = 0.0000460 lb of PM-10/ton of material processed,
0.00014 lb of PM/ton of material processed
(Based on AP-42, Table 11.19.2-2, 8/04).

Feeder loading = 0.000531 lb of PM-10/ton of material processed,
0.001122 lb of PM/ton of material processed
(Based on AP-42, Section 13.2.4.3, 1/95, U = 7.17
mph, M = 0.92%, 90% control for watering)

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Screening = 0.00074 lb of PM-10/ton of material processed,
0.0022 lb of PM/ton of material processed (Based
on AP-42, Table 11.19.2-2, 8/04).

b. Emission Limitations:

Particulate Emissions (PE) shall not exceed 1.13 TPY based upon a rolling, 12-month summation.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 0.41 TPY based upon a rolling, 12-month summation.

Applicable Compliance Method:

The annual emissions were determined by multiplying the emission factors below by the maximum annual production rate for the identified piece of equipment (see PTIO application submitted 06/14/2010).

Conveyor transfer points = 0.0000460 5 lb of PM-10/ton of material processed,
0.00014 lb of PM/ton of material processed
(Based on AP-42, Table 11.19.2-2, 8/04).

Feeder loading = 0.000531 lb of PM-10/ton of material processed,
0.001122 lb of PM/ton of material processed
(Based on AP-42, Section 13.2.4.3, 1/95, U = 7.17
mph, M = 0.92%, 90% control for watering).

Screening = 0.00074 lb of PM-10/ton of material processed,
0.0022 lb of PM/ton of material processed (Based
on AP-42, Table 11.19.2-2, 8/04).

c. Emission Limitation:

Visible particulate emissions from any feeder, screen, chute, conveyor, or transfer point shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations shall be determined by Method 9, 40 CFR Part 60 Appendix A.

(2) Compliance with the production rate limitation in c)(1) shall be demonstrated by the recordkeeping requirements in d)(2).

g) Miscellaneous Requirements

(1) None.



5. F005, BF Slag Dumping Pits

Operations, Property and/or Equipment Description:

BF Slag Dumping Pits

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. b)(1)a., b)(2)a., c)(1), d)(2), and e)(3).

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) | Particulate Emissions (PE) shall not exceed 22.06 TPY based upon a rolling, 12-month summation. Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 10.25 TPY based upon a rolling, 12-month summation. See b)(2)a. and c)(1). |
| b. | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed twenty percent opacity as a three-minute average. |
| c. | OAC rule 3745-17-08(B) | See b)(2)a. |

(2) Additional Terms and Conditions

a. Use of a dedicated water spray when not raining, which is operated as needed, for each blast furnace (BF) slag dumping and material loadout pit such that the applied water either by the use of the dedicated water spray and/or rain

conditions wet the slag feed material to ensure that the applied water meets the visible emission limitation.

- c) Operational Restrictions
 - (1) The annual throughput of slag material shall not exceed 730,000 tons per year based upon a rolling 12-month summation of the monthly slag material through-put amounts.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) Except as otherwise provided in this section, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. The location and color of the emissions;
 - b. Whether the emissions are representative of normal operations;
 - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. The total duration of any visible emission incident; and
 - e. Any corrective actions taken to minimize or eliminate the visible emissions.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. The production rate for each month.
 - b. The rolling, 12-month summation of the production rates.
 - c. The monthly PE and PM10 emissions.
 - d. The rolling, 12-month summation of the PE and PM10 emissions in TPY.
- 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.
 - (2) The permittee shall include in the PER the following: (a) identify all days during which any visible emissions of fugitive dust were observed from the egress points serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible emissions.

Effective Date: To be entered upon final issuance

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation in term c)(1) and/or rolling, 12-month PE and PM10 emission limitation in b)(1)a.

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 appropriate District Office or local air agency).

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Particulate Emissions (PE) shall not exceed 22.06 TPY based upon a rolling, 12-month summation.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 10.25 TPY based upon a rolling, 12-month summation.

Applicable Compliance Method:

The annual emissions were determined by multiplying the emission factors below by the maximum annual production rate for the identified operation (see PTIO application submitted 06/14/2010).

Hot BF Slag to Dumping Station = 0.019 lb of PM/ton of slag handled (Based on using 10% of the factor from AP-42, Table 12.5-1, 1/95).

0.00874 lb of PM/ton of slag handled (Based on using 10% of the factor from AP-42, Table 12.5-1, 1/95 then multiplying by 0.46 for the portion of PM which is PM10).

Digging Hot Slag = 0.011221 lb of PM/ton of slag handled (Based on AP-42, Section 13.2.4.3, 11/06).

0.005307 lb of PM/ton of slag handled (Based on AP-42, Section 13.2.4.3, 11/06).

Digging Cool Slag = 0.011221 lb of PM/ton of slag handled (Based on AP-42, Section 13.2.4.3, 11/06).

0.005307 lb of PM/ton of slag handled (Based on AP-42, Section 13.2.4.3, 11/06).



b. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations shall be determined by Method 9, 40 CFR Part 60 Appendix A.

- (2) Compliance with the production rate limitation in c)(1) shall be demonstrated by the recordkeeping requirements in d)(2).

g) Miscellaneous Requirements

- (1) None.



6. F006, BOF Slag Pot Dumping Station

Operations, Property and/or Equipment Description:

BOF Slag Pot Dumping Station

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. b)(1)a., b)(2)a., c)(1), d)(2), and e)(3).

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) | Particulate Emissions (PE) shall not exceed 14.29 TPY based upon a rolling, 12-month summation. Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 6.64 TPY based upon a rolling, 12-month summation See b)(2)a. and c)(1). |
| b. | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed twenty percent opacity as a three-minute average. |
| c. | OAC rule 3745-17-08(B) | See b)(2)a. |

(2) Additional Terms and Conditions

a. Use of a dedicated water spray when not raining, which is operated as needed, for each basic oxygen furnace (BOF) slag dumping and material load-out pit such that the applied water either by the use of the dedicated water spray and/or rain

conditions wet the slag feed material to ensure that the applied water meets the visible emission limitation.

- c) Operational Restrictions
 - (1) The annual throughput of slag material shall not exceed 946,000 tons per year based upon a rolling 12-month summation of the monthly slag material throughput amounts.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) Except as otherwise provided in this section, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. The location and color of the emissions;
 - b. Whether the emissions are representative of normal operations;
 - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. The total duration of any visible emission incident; and
 - e. Any corrective actions taken to minimize or eliminate the visible emissions.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. The production rate for each month.
 - b. The rolling, 12-month summation of the production rates.
 - c. The monthly PE and PM10 emissions.
 - d. The rolling, 12-month summation of the PE and PM10 emissions in TPY.
- 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.
 - (2) The permittee shall include in the PER the following: (a) identify all days during which any visible emissions of fugitive dust were observed from the egress points serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible emissions.

Effective Date: To be entered upon final issuance

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation in c)(1) and/or rolling, 12-month PE and PM10 emission limitation in b)(1)a.

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 appropriate District Office or local air agency).

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Particulate Emissions (PE) shall not exceed 14.29 TPY based upon a rolling, 12-month summation.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 6.64 TPY based upon a rolling, 12-month summation.

Applicable Compliance Method:

The annual emissions were determined by multiplying the emission factors below by the maximum annual production rate for the identified operation (see PTIO application submitted 06/14/2010).

Hot BOF Slag to Dumping Station = 0.019 lb of PM/ton of slag handled (Based on using 10% of the factor from AP-42, Table 12.5-1, 1/95).

0.00874 lb of PM/ton of slag handled (Based on using 10% of the factor from AP-42, Table 12.5-1, 1/95 then multiplying by 0.46 for the portion of PM which is PM10).

Digging Cool Slag = 0.011221 lb of PM/ton of slag handled (Based on AP-42, Section 13.2.4.3, 11/06).

0.005307 lb of PM/ton of slag handled (Based on AP-42, Section 13.2.4.3, 11/06).

b. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations shall be determined by Method 9, 40 CFR Part 60 Appendix A.

- (2) Compliance with the production rate limitation in c)(1) shall be demonstrated by the recordkeeping requirements in d)(2).
- g) Miscellaneous Requirements
- (1) None.



7. F007, Kish Dumping Station

Operations, Property and/or Equipment Description:

Kish Dumping Station

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. b)(1)a., b)(2)a., c)(1), d)(2), and e)(3).

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) | Particulate Emissions (PE) shall not exceed 0.83 TPY based upon a rolling, 12-month summation. Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 0.38 TPY based upon a rolling, 12-month summation See b)(2)a. and c)(1). |
| b. | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed twenty percent opacity as a three-minute average. |
| c. | OAC rule 3745-17-08(B) | See b)(2)a. |

(2) Additional Terms and Conditions

a. Use of a dedicated water spray when not raining, which is operated as needed, for the kish dumping and material loadout pit such that the applied water either by the use of the dedicated water spray and/or rain conditions wet the slag feed

Effective Date: To be entered upon final issuance material to ensure that the applied water meets the visible emission limitation. This emissions unit shall also employ a partial enclosure to control emissions.

- c) Operational Restrictions
 - (1) The annual throughput of kish material shall not exceed 109,500 tons per year based upon a rolling 12-month summation of the monthly material throughput amounts.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) Except as otherwise provided in this section, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. The location and color of the emissions;
 - b. Whether the emissions are representative of normal operations;
 - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. The total duration of any visible emission incident; and
 - e. Any corrective actions taken to minimize or eliminate the visible emissions.
 - (2) The permittee shall maintain monthly records of the following information:
 - a. The production rate for each month.
 - b. The rolling, 12-month summation of the production rates.
 - c. The monthly PE and PM10 emissions.
 - d. The rolling, 12-month summation of the PE and PM10 emissions in TPY.
- 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.
 - (2) The permittee shall include in the PER the following: (a) identify all days during which any visible emissions of fugitive dust were observed from the egress points serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible emissions.

Effective Date: To be entered upon final issuance

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation in c)(1) and/or rolling, 12-month PE and PM10 emission limitation in b)(1)a.

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 appropriate District Office or local air agency).

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Particulate Emissions (PE) shall not exceed 0.83 TPY based upon a rolling, 12-month summation.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 0.38 TPY based upon a rolling, 12-month summation.

Applicable Compliance Method:

The annual emissions were determined by multiplying the emission factors below by the maximum annual production rate for the identified operation and using a 50% control efficiency for use of a partial enclosure (see PTIO application submitted 06/14/2010).

Hot Kish to Dumping Station = 0.019 lb of PM/ton of slag handled (Based on using 10% of the factor from AP-42, Table 12.5-1, 1/95).

0.00874 lb of PM/ton of slag handled (Based on using 10% of the factor from AP-42, Table 12.5-1, 1/95 then multiplying by 0.46 for the portion of PM which is PM10).

Digging Cool Kish = 0.011221 lb of PM/ton of slag handled (Based on AP-42, Section 13.2.4.3, 11/06).

0.005307 lb of PM/ton slag handled (Based on AP-42, Section 13.2.4.3, 11/06).

b. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed twenty percent opacity as a three-minute average.



Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations shall be determined by Method 9, 40 CFR Part 60 Appendix A.

- (2) Compliance with the production rate limitation in c)(1) shall be demonstrated by the recordkeeping requirements in d)(2).
- g) Miscellaneous Requirements
 - (1) None.



8. F008, Drop Ball Pit

Operations, Property and/or Equipment Description:

Drop Ball Pit

- 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. b)(1)a., b)(2)a., c)(1), d)(2), and e)(3).
- 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) | Particulate Emissions (PE) shall not exceed 0.23 TPY based upon a rolling, 12-month summation. Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 0.10 TPY based upon a rolling, 12-month summation. See b)(2)a. and c)(1). |
| b. | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed twenty percent opacity as a three-minute average. |
| c. | OAC rule 3745-17-08(B) | See b)(2)a. |

- (2) Additional Terms and Conditions
 - a. Use of a water spray, as needed, when not raining for the drop-ball pit and slag handling such that the applied water either by the use of the water spray and/or rain conditions wet the slag feed material to ensure that the applied water meets the visible emission limitation.

- c) Operational Restrictions
- (1) The annual throughput of material to the drop ball pit shall not exceed 256,000 tons per year based upon a rolling 12-month summation of the monthly material throughput amounts.
- d) Monitoring and/or Recordkeeping Requirements
- (1) Except as otherwise provided in this section, the permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. The location and color of the emissions;
 - b. Whether the emissions are representative of normal operations;
 - c. If the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. The total duration of any visible emission incident; and
 - e. Any corrective actions taken to minimize or eliminate the visible emissions.
- (2) The permittee shall maintain monthly records of the following information:
- a. The production rate for each month.
 - b. The rolling, 12-month summation of the production rates.
 - c. The monthly PE and PM10 emissions.
 - d. The rolling, 12-month summation of the PE and PM10 emissions in TPY.
- 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.
- (2) The permittee shall include in the PER the following: (a) identify all days during which any visible emissions of fugitive dust were observed from the egress points serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible emissions.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation in c)(1) and/or rolling, 12-month PE and PM10 emission limitation in b)(1)a.



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 appropriate District Office or local air agency).

f) Testing Requirements

(1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Particulate Emissions (PE) shall not exceed 0.23 TPY based upon a rolling, 12-month summation.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 0.10 TPY based upon a rolling, 12-month summation.

Applicable Compliance Method:

The annual emissions were determined by multiplying the emission factors below by the maximum annual production rate for the identified operation (see PTIO application submitted 06/14/2010).

Slag Material to Dropball Pit = 0.011221 lb of PM/ton of slag handled (Based on AP-42, Section 13.2.4.3, 11/06).

0.005307 lb of PM/ton of slag handled (Based on AP-42, Section 13.2.4.3, 11/06).

Dropball Operation = 0.0054 lb of PM/ton of slag handled (Based on AP-42, Section 11.19.2-2, 11/06).

0.0024 lb of PM/ton of slag handled (Based on AP-42, Section 11.19.2-2, 11/06).

Scrap Loading to Railcars = 0.003 lb of PM/ton of slag handled (Based on AP-42, Section 11.19.2-2, 11/06).

0.0011 lb of PM/ton of slag handled (Based on AP-42, Section 11.19.2-2, 11/06).

BOF Slag Material to Process = 0.011221 lb of PM/ton of slag handled (Based on AP-42, Section 13.2.4.3, 11/06).

0.005307 lb of PM/ton of slag handled



b. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitations shall be determined by Method 9, 40 CFR Part 60 Appendix A.

- (2) Compliance with the production rate limitation in c)(1) shall be demonstrated by the recordkeeping requirements in d)(2).

g) Miscellaneous Requirements

- (1) None.



9. F009, 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. b)(1)a. and c(1).
- 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) | <p>Combined emissions from all operations associated with this emissions unit shall not exceed the following limitations:</p> <p>Particulate Emissions (PE) shall not exceed 22.75 TPY based upon a rolling, 12-month summation.</p> <p>Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 10.78 TPY based upon a rolling, 12-month summation.</p> <p>See c)(1).</p> |
| b. | OAC rule 3745-17-07(B)(6) | There shall be no visible particulate emissions except for a period of time not to exceed thirteen minutes during any 60-minute observation period. |
| c. | OAC rule 3745-17-08 (B), (B)(6) | Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. |



| | | |
|--|-------------------------------|---|
| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
| | | See b)(2)b., b)(2)c., b)(2)d. and b)(2)e. |

(2) Additional Terms and Conditions

- a. The storage piles that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

BF and BOF slag, mill scale, kish , and other scrap materials
- b. The permittee shall employ reasonably 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 permit application, the permittee has committed to treat the load-in and load-out material(s) with water and/or any other suitable dust suppression chemicals to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing additional 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 reasonably 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 permittee's permit application, the permittee has committed to treat each storage pile with water and/or any other suitable dust suppression chemicals via the spray tower at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing additional 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 3745-17-08.

- c) Operational Restrictions
 - (1) The annual throughput of materials for the storage piles is based upon the material throughput limitations established for emissions units F001 through F008. This emissions unit will be in compliance as long as compliance is maintained with those throughput limits.

- 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:
All storage piles.
 - minimum load-in inspection frequency:
Once daily during operation.

 - (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:
All storage piles.
 - minimum load-out inspection frequency:
Once daily during operation.

 - (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:
All storage piles.
 - minimum wind erosion inspection frequency:
Once daily during operation.

 - (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.

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- (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:
- 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;
 - The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - The dates the control measures were implemented; and
 - 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 (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 permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall include in the PER the following: (a) identify all days during which any visible emissions of fugitive dust were observed from the egress points serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible emissions.

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s):
- Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed thirteen minutes during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set

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b. Emission Limitation:

Particulate Emissions (PE) shall not exceed 22.75 TPY based upon a rolling, 12-month summation.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 10.78 TPY based upon a rolling, 12-month summation.

Applicable Compliance Method:

The annual emissions were determined by multiplying the emission factors from AP-42, Section 13.2.4.3, 11/06, by the maximum annual production rate for the identified operation and using a 90% control efficiency watering (see PTIO application submitted 06/14/2010).

g) Miscellaneous Requirements

(1) None.



10. F010, Roadways and Parking

Operations, Property and/or Equipment Description:

Roadways and Parking

- 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. b)(1)a.
- 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) | Particulate Emissions (PE) shall not exceed 7.85 TPY based upon a rolling, 12-month summation. Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 1.59 TPY based upon a rolling, 12-month summation. |
| b. | OAC rule 3745-17-07(B)(5) | There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any 60-minute observation period. |
| c. | OAC rule 3745-17-08(B), (B)(8) and (B9) | Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)b., b)(2)c., b)(2)d., b)(2)e. and b)(2)f. |

(2) Additional Terms and Conditions

- a. The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

unpaved roadways:

All.

unpaved parking areas:

All.

- b. The permittee shall employ reasonably 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 permit application, the permittee has committed to treat the unpaved roadways and parking areas with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing additional control measures to ensure compliance.
- c. 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 a paved or unpaved 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. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- d. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- e. 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.
- f. 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.
- g. 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 3745-17-08.

- 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 each parking area in accordance with the following frequencies:
 - unpaved roadways and parking areas:

All.

minimum inspection frequency:

Once daily during operation.
 - (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 (3)d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, 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.

- (2) The permittee shall include in the PER any of the following occurrences:
 - a. Each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. Each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

f) Testing Requirements

- (1) Compliance with the emission limitations in b) of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

There shall be no visible particulate emissions except for a period of time not to exceed thirteen 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"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

- b. Emission Limitation:

Particulate Emissions (PE) shall not exceed 7.85 TPY based upon a rolling, 12-month summation.

Particulate Emissions 10 microns and less in diameter (PM10) shall not exceed 1.59 TPY based upon a rolling, 12-month summation.

Applicable Compliance Method:

The annual emissions were determined by multiplying the emission factors from AP-42, Section 13.2.2.2, 11/06, by the annual vehicle miles travelled (see PTIO application submitted 06/14/2010).

g) Miscellaneous Requirements

- (1) None.