John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

1/5/2015

Certified Mail

James Conlon
Stein, Inc.
1929 East Royalton Road
Broadview Heights, OH 44147

Facility ID: 0247080619
Permit Number: P0085417
County: Lorain

RE: DRAFT AIR POLLUTION TITLE V PERMIT
Permit Type: Initial

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Chronicle Telegram. A copy of the public notice, the Statement of Basis, 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 "Search for Permits" link under the Permitting topic on the Programs tab. 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
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

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 if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171.

Sincerely,

Erica R. Engel-Ishida, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Ohio EPA-NEDO

PUBLIC NOTICE
1/5/2015 Issuance of Draft Air Pollution Title V Permit

Stein, Inc.
1807 East 28th Street,
Lorain, OH 44052
Lorain County
FACILITY DESC.: Iron and Steel Mills
PERMIT #: P0085417
PERMIT TYPE: Initial
PERMIT DESC: Initial Title V permit for a steel slag processing facility.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: http://epa.ohio.gov/dapc/permitsonline.aspx by entering the permit # or: Anthony Becker, Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road, Twinsburg, OH 44087. Ph: (330)425-9171

Statement of Basis For Air Pollution Title V Permit

Facility ID:	0247080619
Facility Name:	Stein, Inc.
Facility Description:	Steel slag processing
Facility Address:	1807 East 28th Street, Lorain, OH 44052
Permit #:	P0085417, Initial

This facility is subject to Title V because it is major for:

☐ Lead ☐ Sulfur Dioxide ☐ Carbon Monoxide ☐ Volatile Organic Compounds ☐ Nitrogen Oxides
☐ Particulate Matter ≤ 10 microns ☐ Single Hazardous Air Pollutant ☐ Combined Hazardous Air Pollutants
☐ Maximum Available Control Technology Standard(s) ☐ GHG ☐ Title IV

A. Standard Terms and Conditions

Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01(U)?	Yes.
Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them.	Yes, Stein is classified as a support facility for Republic Steel (0247080229) which is a Title V facility. Consequently, a Title V permit is being issued for Stein so that each entity will be responsible for their own respective emissions units.
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1)	None.
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3)	None.

Please identify the affected unit(s)and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)	None.
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E)	None.
Please identify the affected unit(s) and pollutant(s) for which a Compliance Assurance Monitoring (CAM) Plan is required per 40 CFR 64. Provide more emissions unit specific detail in Section C.	CAM does not apply because there are no add-on pollution control devices for each emissions unit.

B. Facility-Wide Terms and Conditions

Term and Condition (paragraph)	Basis		Comments
	SIP (3745-)	Other	
B.1			Lists facility-wide terms and conditions that are enforceable under state law only.
B.2	77-07(A)(13)	N	Lists insignificant emission units that have one or more applicable requirements.

C. Emissions Unit Terms and Conditions

Key:
EU = emissions unit ID
ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit)
OR = operational restriction
M = monitoring requirements
ENF = did noncompliance issues drive the monitoring requirements?
R = record keeping requirements
Rp = reporting requirements
ET = emission testing requirements (not including compliance method terms)
St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement
Misc = miscellaneous requirements

EU(s)	Limitation	Basis		ND	OR	M	ENF	R	Rp	ET	St	Misc	Comments
		SIP (3745-)	Other										
F001	Unpaved	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the

	roadways: PE:7.1 tpy, PM10: 2.1 tpy Paved roadways: PE: 2.2 tpy, PM10: 0.4 tpy												record keeping requirements. Emission testing is not required.
F001	10% opacity	17-07(B)(8)(a)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F001	RACM	17-08(B), 17-08(B)(2) and 17-08(B)(7)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F002	PE:32 tpy, PM10:19 tpy	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F002	20% opacity, 3-min. avg Load-in and load-out	17-07(B)(8)(b)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F002	10% opacity, 3-min. avg Wind erosion	17-07(B)(8)(d)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F002	10% opacity, 3-min. avg grading	17-07(B)(8)(d)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F002	20% opacity, 3-min. avg Truck loading	17-07(B)(8)(b)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F002	RACM	17-08(B) and 17-08(B)(6)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F003	PE: 7.5 tons/ 12-month rolling avg.,	31-05(D)		N	Y	Y	N	Y	Y	N	N	N	OR - burn only diesel fuel in the electrical, generator shall operate at a maximum of 3,432 hours per rolling, 12-month period, and not process more than 1,000,000 tons of slag per

	PM10: 3.2 tons/ 12-month rolling avg.												rolling, 12-month ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F003	20% opacity, 3-min. avg Load-in and load-out	17-07(B)(1)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F003	RACM	17-08(B)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F003 diesel engine	CO: 3.01 lbs/hr and 5.2 tons/12-month rolling avg. SO2: 0.92 lb/hr and 1.6 tons/12-month rolling avg. OC: 1.13 lbs/hr and 2 tons/12-month rolling avg. PE: 0.99 lb/hr and 1.7 tons/12-month rolling avg. NOx: 13.95 lbs/hr and 24 tons/12-month rolling avg.	31-05(D)		N	Y	Y	N	Y	Y	N	N	N	OR - burn only diesel fuel in the electrical, generator shall operate at a maximum of 3,432 hours per rolling, 12-month period, and not process more than 1,000,000 tons of slag per rolling, 12-month ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F003 diesel engine	20% opacity, 6-min. avg	17-07(A)(1)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F003	PE: 0.310	17-11(B)(5)(a)											ET - Permittee shall demonstrate compliance through the

diesel engine	lb/mmbtu			N	N	Y	N	Y	Y	N	N	N	record keeping requirements. Emission testing is not required.
F004	PE:1.2 tons/ 12-month rolling avg., PM10:0.9 tons/ 12-month rolling avg.	31-05(D)		N	Y	Y	N	Y	Y	N	N	N	OR - The permittee shall not process more than 650,000 tons of slag per rolling, 12-month period. ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F004	10% opacity, 6-min. avg.	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F004		17-07(B)(1)		NA	NA	NA	NA	NA	NA	NA	NA	NA	This rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
F004	RACM	17-08(B)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F005	PE: 2.7 tpy, PM10: 1.4 tpy	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F005	10% opacity, 6-min. avg Load-in and load-out	17-07(B)(1)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F005	RACM	17-08(B)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F005		17-07(B)(1)		NA	NA	NA	NA	NA	NA	NA	NA	NA	This rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
F006	PE: 1.4 tpy, PM10: 0.5 tpy	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F006	20% opacity, 3-min. avg.	17-07(B)(1)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F006	RACM	17-08(B)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.

F007	PE: 3.0 tpy, PM10 1.1 tpy.	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F007	No VE, except 1-minute in 60 minutes wind erosion	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F007		17-07(B)(6), 17-07(B)(8)(b) 17-07(B)(8)(d)		NA	NA	NA	NA	NA	NA	NA	NA	NA	These rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
F007	RACM	17-08(B)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F007	20% opacity, 3-min. avg. truck loading	17-07(B)(8)(b), 17-07(B)(1)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F010	PE: 3.8 ton/yr, PM10: 1.9 ton/yr	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F010	RACM	17-08(B)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F010	20% opacity, 3-min. avg. drop ball, truck loading	17-07(B)(1)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F012	PE:4.4 tpy, PM10: 1.3 tpy	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F012	10% opacity, located at Republic Steel in Lorain	17-07(B)(8)(a)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.
F012	13 minutes in 60 minute period	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.

F012	RACM	17-08(B), 17-08(B)(2) and 17-08(B)(7)		N	N	Y	N	Y	Y	N	N	N	ET - Permittee shall demonstrate compliance through the record keeping requirements. Emission testing is not required.

DRAFT

Division of Air Pollution Control
Title V Permit
for
Stein, Inc.

Facility ID:	0247080619
Permit Number:	P0085417
Permit Type:	Initial
Issued:	1/5/2015
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Division of Air Pollution Control
Title V Permit
for
Stein, Inc.

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Authorization

Facility ID:	0247080619
Facility Description:	Steel slag processing
Application Number(s):	A0016075, A0052219
Permit Number:	P0085417
Permit Description:	Initial Title V permit for a steel slag processing facility.
Permit Type:	Initial
Issue Date:	1/5/2015
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Stein, Inc.
1807 East 28th Street
Lorain, OH 44052

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northeast District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordingsfor continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submittedscheduled maintenancerequests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Ohio EPA DAPC, Northeast District Office. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Northeast District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from

federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northeast District Office unless otherwise specified.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. Title IV Provisions

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

(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

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

(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

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

(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible

Officialthat, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the Ohio EPA DAPC, Northeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Ohio EPA DAPC, Northeast District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittentconsistent with A.13.d.2.a above.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.

e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Ohio EPA DAPC, Northeast District Office with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Ohio EPA DAPC, Northeast District Office as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met.

This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(Authority for term: OAC rule 3745-77-07(I))

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. Air Pollution Nuisance

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

(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, noemissions unit identified in this permit that has beencertified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11)))

24. Reporting Requirements Related to Monitoring and Record Keeping RequirementsUnder State Law Only

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to theOhio EPA DAPC, Northeast District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northeast District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention RequirementsUnder State Law Only

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine

whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

(Authority for term: OAC rule 3745-77-07(C))

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northeast District Office in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northeast District Office must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or

c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event ofan alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Northeast District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, and/or 40 CFR Part 60 or 63:

EU ID	Operations, Property and/or Equipment Description
F008	Blast furnace slag pits PTI P0107417, issued 2/3/2011
F009	Oxygen lance cutting operations PTI: P0107417, issued 2/3/2011
F011	Portable lance cutting operations PTI: P0117996, issued 11/5/2014

[Authority for term: OAC rule 3745-77-07(A)(13)]

C. Emissions Unit Terms and Conditions

1. F001, Roads and Parking

Operations, Property and/or Equipment Description:

Facility-wide Roadways and Parking areas

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
(paved and unpaved roadways and parking areas)		
a.	OAC rule 3745-31-05(A)(3) (PTI P0106779, issued 6/2/2011)	Particulate emissions (PE) shall not exceed 7.1 ton/yr and particulate matter less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 2.1 tons/yr from unpaved roadways and parking areas. PE shall not exceed 2.2 tons/yr and PM_{10} shall not exceed 0.4 tons/yr from paved roadways and parking areas. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)b through b)(2)g.
(unpaved roadways and parking areas)		
b.	OAC rule 3745-17-07(B)(8)(a)	Visible particulate emissions from any unpaved roadway or parking area shall not exceed 10 percent opacity. A data set shall consist of twelve observations based on four uninterrupted vehicle passes, three observations per vehicle pass.
c.	OAC rules 3745-17-08(B), 3745-17-08(B)(2) and 3745-17-08(B)(7)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)b

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		through b)(2)g.
(paved and unpaved roadways and parking areas)		
d.	OAC rule 3745-17-07(B)(8)(a)	Visible particulate emissions from any paved roadway or parking area shall not exceed 10 percent opacity. A data set shall consist of twelve observations based on four uninterrupted vehicle passes, three observations per vehicle pass.
e.	OAC rules 3745-17-08(B), 3745-17-08(B)(7), 3745-17-08(B)(8) and 3745-17-08(B)(9)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)b, b)(2)c and b)(2)e through b)(2)g.

a. The unpaved and paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07, 3745-17-08 and 3745-31-05 are listed below:

unpaved roadways:
i. main plant road
ii. east plant road
iii. roadways in and around main BOF processing plant
iv. roadways in and around main BF processing plant
v. roadways in and around Mill scale processing plant
vi. roadways around all storage piles

unpaved parking areas:
vii. parking lot by the office
viii. parking lot by main BOF processing plant
ix. parking lot by main BF processing plant
x. parking lot by Mill scale processing plant
xi. parking lot by east plant area

paved roadways:
xii. main plant road
xiii. east plant entrance

paved parking areas:
xiv. parking lot by the office

b. The permittee shall employ best available control measures on all unpaved roadways and parking areas and all paved 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 and paved 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 other 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 an unpaved roadway or parking area or a paved roadway and 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, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using appropriate dust control measures for paved surfaces. 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 specified in OAC rule 3745-17-07(B)(4).

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. Any material carried off of the permittee's property and deposited onto public streets by vehicular traffic or by erosion by water, etc., shall be promptly removed and disposed of properly to minimize or prevent resuspension.

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 measure(s) in accordance with the terms and conditions of this permit are appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

unpaved roadways:	minimum inspection frequency:
all	from May 1 to September 30: daily, when in use from October 1 to April 30: weekly, when in use

unpaved parking areas:	minimum inspection frequency:
all	from May 1 to September 30: daily, when in use from October 1 to April 30: weekly, when in use

paved roadways:	minimum inspection frequency:
all	from May 1 to September 30: daily, when in use from October 1 to April 30: weekly, when in use

paved parking areas:	minimum inspection frequency:
all	from May 1 to September 30: daily, when in use from October 1 to April 30: weekly, when in use

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(3) The permittee may, upon receipt of written approval from the Ohio EPA, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

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

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

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

c. the dates the control measures were implemented; and

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

The information required in d)(4)d shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

e) Reporting Requirements

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

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

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

Visible particulate emissions from any unpaved roadway or parking area shall not exceed 10 percent opacity.

Visible particulate emissions from any paved roadway or parking area shall not exceed 10 percent opacity.

<u>Applicable Compliance Method</u>:

If required, compliance with the limitations for visible emissions of fugitive dust shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3)(d).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

b. Emission Limitation:

PE shall not exceed 7.1 tons/yr and PM_{10} shall not exceed 2.1 tons/yr from unpaved roadways and parking areas.

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$EF = k\left[\left(\frac{s}{12}\right)^{a}\right] x \left[\left(\frac{W}{3}\right)^{b}\right] x \left[\frac{(365-P)}{365}\right]$$

AP-42 section 13.2.2., Eq. 2 (11/06)

where:

EFs are listed below (or use most recent versions):

EF = annual sized-specific emission factor, lb/VMT;
k = (empirical constants, lb/VMT), TSP = 4.9, PM_{10} = 1.5;
s = surface material silt content (%), s = 10.2%;
W = mean vehicle weight (tons), W = 33 tons;
a = (empirical constants), TSP = 0.7, PM_{10} = 0.9;
b = (empirical constants), TSP = 0.45, PM_{10} = 0.45; and
P = number of days with > 0.01 in. of precipitation, 158 (avg CY 2008 and 2009 at KLPR).

$$EF(PE) = 4.9\, x \left[\left(\frac{10.2}{12}\right)^{0.7} x \left(\frac{33}{3}\right)^{0.45}\right] x \left[1 - \frac{158}{365}\right] = 7.3\, lbs \frac{PE}{VMT}$$

$$EF(PM10) = 1.5\, x \left[\left(\frac{10.2}{12}\right)^{0.9} x \left(\frac{33}{3}\right)^{0.45}\right] x \left[1 - \frac{158}{365}\right] = 2.2\, lbs \frac{PM10}{VMT}$$

The calculated emission factor (EF) shall be multiplied by the total miles traveled (in miles/yr), and by applying a control efficiency of 80% for the application of water (1 - 0.80) and divided by 2,000 lbs/ton, annual estimated emissions shall be calculated as follows:

$$Annualemissions(PE) = \left(7.3\frac{lbs}{mi}\right) x \left(\frac{miles}{yr}\right) x (1 - 0.80) x \left(\frac{1}{2000}\right)$$

$$Annualemissions(PM10) = \left(2.2\frac{lbs}{mi}\right) x \left(\frac{miles}{yr}\right) x (1 - 0.80) x \left(\frac{1}{2000}\right)$$

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

c. Emission Limitation:

PE shall not exceed 2.2 tons/yr and PM_{10} shall not exceed 0.4 ton/yr from paved roadways and parking areas.

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$EF = [k\ x\ (sL)^{0.91}\ x\ (W)^{1.02}]x\ \left[1 - \frac{P}{4N}\right]$$

(AP-42 section 13.2.1., Eq. 2(1/11))

where:

EFs are listed below (or use most recent versions):

EF = annual sized-specific emission factor, lb/VMT;
k = (empirical constants, lb/VMT), PE = 0.011, PM_{10} = 0.0022;
sL = road silt loading content (%), sL = 9.7%;
W = mean vehicle weight (tons), W = 33 tons;
P = number of days with > 0.01 in. of precipitation, 158 (avg CY 2008 and 2009 at KLPR); and
N = number of days in the averaging period, 365.

$$EF(PE) = [0.011\ x\ (9.7)^{0.91}\ x\ (33)^{1.02}]x\ \left[1 - \frac{158}{4x365}\right] = 2.7\ lbs\frac{PE}{VMT}$$

$$EF(PM10) = [0.0022\ x\ (9.7)^{0.91}\ x\ (33)^{1.02}]x\ \left[1 - \frac{158}{4x365}\right] = 0.55\ lbs\frac{PM10}{VMT}$$

The calculated emission factor (EF) shall be multiplied by the total miles traveled (in miles/yr), and by applying a control efficiency of 80% for the application of water (1 - 0.80) and divided by 2,000 lbs/ton, annual estimated emissions shall be calculated as follows:

$$Annual\ emissions\ (PE) = \left(2.7\frac{lbs}{mi}\right)x\ \left(\frac{miles}{yr}\right)x\ (1 - 0.80)x\ \left(\frac{1}{2000}\right)$$

$$Annual\ emissions\ (PM10) = \left(0.55\frac{lbs}{mi}\right)x\ \left(\frac{miles}{yr}\right)x\ (1 - 0.80)x\ \left(\frac{1}{2000}\right)$$

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

g) Miscellaneous Requirements

(1) None.

2. F002, Storage Piles

Operations, Property and/or Equipment Description:

Facility-wide Storage Piles

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
load-in and load-out of storage piles, wind erosion of storage piles and truck loading operations (loading materials in trucks)		
a.	OAC rule 3745-31-05(A)(3) (PTI P0106779, issued 6/2/2011)	Particulate emissions (PE) shall not exceed 32 tons/yr and particulate matter less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 19 tons/yr from load-in and load-out of storage piles, wind erosion of storage piles and truck loading operations. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a through b)(2)i.
load-in and load-out of storage piles, and wind erosion of storage piles		
b.	OAC rule 3745-17-07(B)(8)(b)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. (load-in and load-out from storage piles)
c.	OAC rule 3745-17-07(B)(8)(d)	Visible emissions of fugitive dust from wind erosion shall not exceed 10% opacity as a 3-minute average. (wind erosion from storage piles)
d.	OAC rules 3745-17-08(B) and 3745-17-08(B)(6)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a through b)(2)d and b)(2)i.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
storage piles (pile working operations on top of storage piles, including compacting, grading or transporting materials)		
e.	OAC rule 3745-17-07(B)(8)(c)	Visible emissions of fugitive dust from the operation of vehicles on top of any material storage pile, including compacting, grading or transporting materials shall not exceed 10 percent opacity as a 3-minute average. A data set shall consist of twelve observations based on four uninterrupted vehicle passes, three observations per vehicle pass.
f.	OAC rules 3745-17-08(B) and 3745-17-08(B)(6)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)e through b)(2)f and b)(2)i.
truck loading operations (loading materials in trucks)		
g.	OAC rule 3745-17-07(B)(8)(b)	Visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average. (truck loading operations: loading materials in trucks)
h.	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)g through b)(2)i.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintain minimal drop heights for stackers and front-loaders, and chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance. The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. 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.

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

d. 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.

e. The permittee shall employ best available control measures on all working operations on top of storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to employ precautionary operating practices and/or treat the pile working operations with watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

f. The above-mentioned control measure(s) shall be employed for working operations on top of each storage piles 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.

g. The permittee shall employ best available control measures on all truck loading operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintain minimal drop heights for front-loaders to ensure compliance. The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

h. The above-mentioned control measure(s) shall be employed for each truck loading operation 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.

i. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit are appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

storage pile identification	minimum load-in inspection frequency
all, including surge piles	from May 1 to September 30: daily, when operating from October 1 to April 30: weekly, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

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

storage pile identification	minimum load-out inspection frequency
all, including surge piles	from May 1 to September 30: daily, when operating from October 1 to April 30: weekly, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

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

storage pile identification	minimum wind erosion inspection frequency
all, including surge piles	from May 1 to September 30: daily, when operating from October 1 to April 30: weekly, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(4) Except as otherwise provided in this section, the permittee shall perform inspections of working operations on top of each storage piles (compacting, grading or transporting materials) in accordance with the following frequencies:

storage pile identification:	minimum working pile inspection frequency:
all, including surge piles	from May 1 to September 30: daily, when operating from October 1 to April 30: weekly, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(5) Except as otherwise provided in this section, the permittee shall perform inspections of loading materials in trucks at each truck loading area in accordance with the following frequencies:

truck loading area identification	minimum truck loading inspection frequency
all	from May 1 to September 30: daily, when operating from October 1 to April 30: weekly, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(6) 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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(7) 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, wind erosion from the surface of a storage pile, working pile operations, and truck loading (loading materials into trucks). The inspections shall be performed during representative, normal storage pile operating conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

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

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

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

c. the dates the control measures were implemented; and

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(9) The information required in d)(8)d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, (iii) the pile surfaces (wind erosion), (iv) working pile operations, and (v) truck loading operations and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

e) Reporting Requirements

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation (load-in and load-out operation of storage piles)</u>:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. (load-in and load-out from storage piles)

Visible emissions of fugitive dust from wind erosion shall not exceed 10% opacity as a 3-minute average. (wind erosion from storage piles)

Visible emissions of fugitive dust from the operation of vehicles on top of any material storage pile, including compacting, grading or transporting materials shall not exceed 10 percent opacity as a 3-minute average.

Visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average. (truck loading operations: loading materials in trucks)

Applicable Compliance Method:

If required, compliance with the limitations for visible emissions of fugitive dust shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3)(d).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI: P0106779]

b. Emission Limitation:

PE shall not exceed 32 tons/yr and PM_{10} shall not exceed 19 tons/yr from load-in and load-out of storage piles, wind erosion of storage piles and truck loading operations.

Applicable Compliance Method:

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 13.2.4 (11/06) and US EPA document "Control of Open Fugitive Dust" (9/88) as follows:

$$\mathrm{E(tons/yr)} = \left(\frac{1}{2000}\right) \mathrm{x} \sum_{i}^{n} \mathrm{EF\ x\ PWR\ x} \left(1 - \frac{\mathrm{ER}}{100}\right) + \left(\frac{1}{2000}\right) \mathrm{x} \sum_{j}^{m} \mathrm{EF(2) x\ Acres\ x\ Duration\ x} \left(1 - \frac{\mathrm{ER}}{100}\right)$$

where:

E = emission rate (tons/yr), summation of emissions from all load-in, load-out operations, truck loading and wind erosion;

i = each storage pile operation type (i.e., load-in, load-out and truck loading);
n = number of storage pile operation types;
PWR = process weight rate, in tons per year, for each storage pile operation type (i.e., load-in, load-out and truck loading);
ER = overall emission reduction efficiency, in % (ER = 80%);
EF = emission factor from AP-42, in lb/ton, for each storage pile operation type;

EF(2) = emission factor for wind erosion from USEPA, "Control of Open Fugitive Dust", in lb/day/acre, for each storage pile;
Acres = size of storage pile, in acres;
Duration = average time of each material stored, in days;
j = each storage pile, acres of each pile and duration of each materials stored; and
m = number of storage piles.

EFs are listed below (or use most recent versions):

i. $$EF = k(0.0032)\left[\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}\right]$$

a) AP-42, section 13.2.4, Eq 1,

where:

EF = emission factor, for load-in operations, (lb/ton);
k = particle size multiplier for particulate (dimensionless): TSP = 0.74 and PM_{10} = 0.35;
U = mean wind speed, mph = 10.8; and
M = material moisture content.

ii. $$EF = k(0.0032)\left[\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}\right]$$

AP-42, section 13.2.4, Eq 1, (load-out operations)

where:

EF = emission factor, for load-out operations, (lb/ton);
k = particle size multiplier for particulate (dimensionless): TSP = 0.74 and PM_{10} = 0.35;
U = mean wind speed, mph = 10.8; and
M = material moisture content.

iii. $$EF = k(0.0032)\left[\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}\right]$$

AP-42, section 13.2.4, Eq 1, (truck loading)

where:

EF = emission factor, for load-out operations, (lb/ton);
k = particle size multiplier for particulate (dimensionless): TSP = 0.74 and PM_{10} = 0.35;
U = mean wind speed, mph = 10.8; and
M = material moisture content.

iv. $$EF(2) = 1.7\left[\left(\frac{s}{1.5}\right)\left(\frac{365-p}{235}\right)\left(\frac{f}{15}\right)\right]$$

c) USEPA, Control of Open Fugitive

where:

EF(2) = emission factor, for wind erosion (lb/day/acre);
s = surface material silt content, in %;
p = number of days with > 0.01 in. of precipitation, p = 158;
f = percentage of time that the unobstructed wind speed exceeds 12 mph at the mean height , % f = 30; and
50.0% TSP = PM_{10}.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

g) Miscellaneous Requirements

(1) None.

3. F003, Main Plant

Operations, Property and/or Equipment Description:

Main BOF Slag Processing Plant

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
(Main BOF slag processing plant)		
a.	OAC rule 3745-31-05(D) (PTI P0106779, issued 6/2/2011)	Particulate emissions (PE) shall not exceed 7.5 tons per rolling, 12-month period. Particulate matter less than or equal to 10 micrometers in diameter (PM_{10}) shall not exceed 3.2 tons per rolling, 12-month period. See c)(3).
b.	OAC rule 3745-31-05(A)(3)	The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissionsof fugitive dust. See b)(2)b through b)(2)d.
c.	OAC rule 3745-17-07(B)(1)	Visible emissions of fugitive dust shall not exceed 20 percent opacity, as a 3-minute average.
d.	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.See b)(2)b through b)(2)d.
(450 HP diesel electrical generator)		
e.	OAC rule 3745-31-05(D) (PTI P0106779, issued 6/2/2011)	Nitrogen oxides (NO_x) emissions shall not exceed 13.95 lbs/hr and 24 tons per rolling, 12-month period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Carbon monoxide (CO) emissions shall not exceed 3.01 lbs/hr and 5.2 tons per rolling, 12-month period. Sulfur dioxide (SO_2) emissions shall not exceed 0.92 lb/hr and 1.6 tons per rolling, 12-month period. Organic compound (OC) emissions shall not exceed 1.13 lbs/hr and 2 tons per rolling, 12-month period. PE (PE = PM_{10}) shall not exceed 0.99 lb/hr and 1.7 tons per rolling, 12-month period. See c)(2).
f.	OAC rule 3745-31-05(D)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(5)(a).
g.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.
h.	OAC rule 3745-17-11(B)(5)(a)	PE shall not exceed 0.310 pound per million Btu of actual heat input.
i.	OAC rule 3745-18-06(F)	Exempt in accordance with OAC rule 3745-18-06(B).

(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. Grizzley feeder
ii. Crusher
iii. Screens
iv. Conveyors and associated transfer points
v. Slag pits: load-in and load-out operations
vi. Dropping cooled slag into pots (“slagging or cushioning”)

b. The permittee shall employ reasonably 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 operations:
Grizzley feeder,crusher, screens, conveyors and associated transfer points

Control measures:
Minimize drop heights at grizzley feeder and apply sufficient water, as needed, to control dust

Material handling operations:
"slagging or cushioning" of pots

Control measures:
Minimize drop heights

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

c. For each material handling operation that is not adequately enclosed, the above-identified control measure shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure is necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure shall continue during the operation of the material handling operations until further observation confirms that use of the control measure is unnecessary.

d. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit are appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

c) Operational Restrictions

(1) The permittee shall burn only diesel fuel in the electrical generator for this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0106779]

(2) The diesel electrical generator shall operate at a maximum of 3,432 hours per rolling, 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0106779]

(3) The permittee shall not process more than 1,000,000 tons of slag per rolling, 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0106779]

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than diesel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

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

Material handling operation(s)	Minimum inspection frequency
Grizzley feeder	daily, when operating
Crusher	daily, when operating
Screens	daily, when operating
Conveyers and associated transfer points	daily, when operating
Slag pits: load-in and load-out operations	daily, when operating
“Slagging or cushioning” of pots	daily, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(3) The above-mentioned inspections shall be performed during representative, normal operating conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(4) The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

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

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

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

c. the dates the control measure(s) was (were) implemented; and

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

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

a. the hours of operation of the diesel electrical generator, in hours per month; and

b. the rolling, 12-month summation of hour of operation of the diesel electrical generator, calculated by adding the current month's operating hour to the preceding eleven calendar months.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

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

a. the amount of slag processed, in tons per month; and

b. the rolling, 12-month summation of slag processed, calculated by adding the current month's ton of slag processed to the preceding eleven calendar months.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(2) The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(3) The permittee shall submit deviation reports that identify any of the following occurrences:

a. identify the actual hours of operation each month and when the hours of operation of the diesel electrical generator exceeded the operating restriction of 3,432 hours per rolling, 12-month period; and

b. identify the actual amount of slag processed each month and when the slag processed exceeded the throughput restriction of 1,000,000 tons per rolling, 12-month period.

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation (Main BOF slag processing plant):

PE shall not exceed 7.5 tons per rolling, 12-month period.

PM_{10} shall not exceed 3.2 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, 8/04) and Section 13.2.4, Eqn. 1 (load-in and load-out operations, 11/06) as follows:

$$\mathrm{E(tons/yr)} = \left(\frac{1}{2000}\right) \text{ x } \sum_{i}^{n} \mathrm{EF \text{ x } PWR} \text{ x } \left(1 - \frac{\mathrm{ER}}{100}\right)$$

where:

E = emission rate (tons/yr), summation of emissions from all operations listed in b)(2)a;

i = operation type;
n = number of operations;
PWR = process weight rate, in tons per rolling, 12-month period, for each operation type listed in b)(2)a;
ER = overall emission reduction efficiency, in %, for each operation type listed in b)(2)a; and

EF = emission factor from AP-42, in lb/ton, for each operation type listed in b)(2)a. EFs are listed below (or use most recent versions):

i. EF = 0.0191 PM, 0.00904 $PM_{10,}$ (dumping slag in pits)
Section 13.2.4, Eqn. 1
where U=10.8 mph and M=0.92% moisture content
ER = 50%

ii. EF = 0.0024 PM, 0.00115 $PM_{10,}$ (load-out at pits)
Section 13.2.4, Eqn. 1
where U=10.8 mph and M=4.0% moisture content

ER = 80%

iii. EF = 0.0024 PM, 0.00115 $PM_{10,}$ (load-in at Grizzley)
Section 13.2.4, Eqn. 1
where U=10.8 mph and M=4.0% moisture content
ER = 80%

iv. EF = 0.0012 PM, 0.00054 $PM_{10,}$ Table 11.19.2-2 (each crusher)
ER = 0%

v. EF = 0.00014 PM, 0.000046 PM_{10}, Table 11.19.2-2 (each conveyor transfer point)
ER = 0%

vi. EF = 0.0022 PM, 0.00074 PM_{10}, Table 11.19.2-2 (each screen)
ER = 0%

EFs for crushing, conveyor transfer points and screening are based on controlled emissions. Therefore, each ER will be equal to zero (0) for those material handling operation types, when using the above equation for calculating emissions.

There are not separate EFs (PM and PM_{10}) for "Slagging or cushioning". Those emissions are included with the above EFs for "dumping slag in pits".

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

b. Emission Limitation (Main BOF slag processing plant):

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

Applicable Compliance Method:

If required, compliance with the limitations for visible emissions of fugitive dust shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

c. Emission Limitations (450 HP diesel generator):

NO_x emissions shall not exceed 13.95 lbs/hr and 24 tons per rolling, 12-month period.

CO emissions shall not exceed 3.01 lbs/hr and 5.2 tons per rolling, 12-month period.

SO_2 emissions shall not exceed 0.92 lb/hr and 1.6 tons per rolling, 12-month period.

OC emissions shall not exceed 1.13 lbs/hr and 2 tons per rolling, 12-month period.

PE (PE = PM_{10}) shall not exceed 0.99 lb/hr and 1.7 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 3.3, for "Gasoline and Diesel Industrial Engines", found in Table 3.3-1 as follows:

E = EF x 450 hp

where:

E = emission rate (pounds per hour); and
EF = emission factors from AP-42, Fifth edition, Section 3.3 for "Gasoline and Diesel Industrial Engines", 10/96, Table 3.3-1 and are listed below:

i. 0.031 lb/hp-hrNO_x
ii. 0.00668 lb/hp-hr CO
iii. 0.00205 lb/hp-hr SO_2
iv. 0.00251 lb/hp-hr OC
v. 0.0022 lb/hp-hr PE

450 hp = power output (hp)

Each tons/yr emission limitation was developed by multiplying the short-term allowable emission limitation, in lbs/hr, by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

d. Emission Limitations (450 HP diesel generator):

PE shall not exceed 0.310 pound per million Btu of actual heat input.

Applicable Compliance Method:

The particulate emission limitation for this emissions unit has been established using the emission factor of 0.0022 pound/hp-hr or 0.310 pound/MMBtu, as outlined in AP-42, Section 3.3 for "Gasoline and Diesel Industrial Engines", Table 3.3-1; and this limit is also set by rule.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

e. Emission Limitation (450 HP diesel generator):

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with the limitation for visible particulate emissions shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

g) Miscellaneous Requirements

(1) None.

4. F004, BF Plant

Operations, Property and/or Equipment Description:

Blast Furnace Slag Processing Plant

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (PTI P0106779, issued 6/2/2011)	Particulate emissions (PE) shall not exceed 1.2 ton per rolling, 12-month period. Particulate Matter less than or equal to 10 micrometers in diameter (PM_{10}) shall not exceed 0.9 ton per rolling, 12-month period. See c)(1).
b.	OAC rule 3745-31-05(A)(3)	Visible emissions of fugitive dust shall not exceed 10 percent opacity, as a 6-minute average. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissionsof fugitive dust. See b)(2)b through b)(2)d.
c.	OAC rule 3745-17-07(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-08(B)	They permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.See b)(2)b through b)(2)d.

(2) Additional Terms and Conditions

a. The operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

i. Grizzley feeder
ii. Crushers
iii. Screens
iv. Conveyors and associated transfer points

b. The permittee shall employ best available control measures for the above-identified operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the submitted permit application, the permittee has committed to perform the following control measure to ensure compliance:

Operations:
Grizzley feeder,crushers, screens,conveyors and associated transfer points

Control measures:
Minimize drop heights at grizzley feeder and apply sufficient water, as needed, to control dust

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

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

d. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit are appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

c) Operational Restrictions

(1) The permittee shall not process more than 650,000 tons of slag per rolling, 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0106779]

d) Monitoring and/or Recordkeeping Requirements

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

Operation(s)	Minimum inspection frequency
Grizzley feeder	daily, when operating
Crushers	daily, when operating
Screens	daily, when operating
Conveyers and associated transfer points	daily, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(2) The above-mentioned inspections shall be performed during representative, normal operating conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(3) The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

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

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

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

c. the dates the control measure(s) was (were) implemented; and

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

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

a. the amount of slag processed, in tons per month; and

b. the rolling, 12-month summation of slag processed, calculated by adding the current month's tons of slag processed to the preceding eleven calendar months.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

e) Reporting Requirements

(1) The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

(2) The permittee shall submit deviation reports that identify any of the following occurrences:

a. identify the actual amount of slag processed each month and when the slag processed exceeded the throughput restriction of 650,000 tons per rolling, 12-month period.

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation (Main BF slag processing plant)</u>:

PE shall not exceed 1.2 ton per rolling, 12-month period.

PM_{10} shall not exceed 0.9 ton per rolling, 12-month period.

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, 8/04) and Section 13.2.4, Eqn. 1 (load-in and load-out operations, 11/06) as follows:

$$E(\text{tons/yr}) = \left(\frac{1}{2000}\right) \text{ x } \sum_{i}^{n} \text{EF x PWR x } \left(1 - \frac{ER}{100}\right)$$

where:

E = emission rate (tons/yr), summation of emissions from all operations listed in b)(2)a;

i = operation type;
n = number of operations;
PWR = process weight rate, in tons per rolling, 12-month period, for each operation type listed in b)(2)a;
ER = overall emission reduction efficiency, in %, for each operation type listed in b)(2)a; and

EF = emission factor from AP-42, in lb/ton, for each operation type listed in b)(2)a. EFs are listed below (or use most recent versions):

i. EF = 0.0024 PM, 0.00115 $PM_{10,}$ (load-in at Grizzley)
Section 13.2.4, Eqn. 1
where U=10.8 mph and M=4.0% moisture content
ER = 80%

ii. EF = 0.0012 PM, 0.00054 $PM_{10,}$ Table 11.19.2-2 (each crusher)
ER = 0%

iii. EF = 0.00014 PM, 0.000046 PM_{10}, Table 11.19.2-2 (each conveyor transfer point)
ER = 0%

iv. EF = 0.0022 PM, 0.00074 PM_{10}, Table 11.19.2-2 (each screen)
ER = 0%

EFs for crushing, conveyor transfer points and screening are based on controlled emissions. Therefore, each ER will be equal to zero (0) for those material handling operation types, when using the above equation for calculating emissions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

b. Emission Limitation (Main BF slag processing plant):

Visible emissions of fugitive dust shall not exceed 10 percent opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the limitation for visible particulate emissions shall be demonstrated based upon visible particulate emission observations performed in

accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0106779]

g) Miscellaneous Requirements

(1) None.

5. F005, Refuge Plant

Operations, Property and/or Equipment Description:

Mill Scale Plant

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
(Mill scale processing plant, including grit operation)		
a.	OAC rule 3745-31-05(A)(3) (PTI P0117956, issued 11/5/2014)	Particulate emissions (PE) shall not exceed 2.7 tons/yr. Particulate Matter less than or equal to 10 micrometers in diameter (PM_{10}) shall not exceed 1.4 tons/yr.
b.	OAC rule 3745-31-05(A)(3)	Visible emissions of fugitive dust shall not exceed 10 percent opacity, as a 6-minute average. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissionsof fugitive dust. See b)(2)b through b)(2)d.
c.	OAC rule 3745-17-07(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.See b)(2)b through b)(2)d.

(2) Additional Terms and Conditions

a. The operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

i. Grizzley feeder
ii. Screen
iii. Conveyors and associated transfer points

b. The permittee shall employ best available control measures for the above-identified operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the submitted permit application, the permittee has committed to perform the following control measure to ensure compliance:

Operations:
Grizzley feeder,screen, conveyors and associated transfer points

Control measures:
Minimize drop heights at grizzley feeder and apply sufficient water, as needed, to control dust

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

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

d. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit are appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

Operation(s)	Minimum inspection frequency
Grizzley feeder	daily, when operating
Screen	daily, when operating
Conveyers and associated transfer points	daily, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117956]

(2) The above-mentioned inspections shall be performed during representative, normal operating conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117956]

(3) The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117956]

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

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

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

c. the dates the control measure(s) was (were) implemented; and

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117956]

e) Reporting Requirements

(1) The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117956]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation (Mill Scale processing plant):

PE shall not exceed 2.7tons/yr.

PM_{10} shall not exceed 1.4tons/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 11.19.2 (Crushed Stone Processing and Pulverized Mineral Processing, 8/04) and Section 13.2.4 (load-in and load-out operations, 11/06) as follows:

$$\mathrm{E(tons/yr)} = \left(\frac{1}{2000}\right) \text{ x } \sum_{i}^{n} \mathrm{EF \text{ x } PWR} \text{ x } \left(1 - \frac{\mathrm{ER}}{100}\right)$$

where:

E = emission rate (tons/yr), summation of emissions from all operations listed in b)(2)a;

i = operation type;
n = number of operations;
PWR = process weight rate, in tons/yr, for each operation type listed in b)(2)a;
ER = overall emission reduction efficiency, in %, for each operation type listed in b)(2)a; and

EF = emission factor from AP-42, in lb/ton, for each operation type listed in b)(2)a. EFs are listed below (or use most recent versions):

i. EF = 0.0024 PM, 0.00115 $PM_{10,}$ (load-in at Grizzley)
Section 13.2.4, Eqn. 1
where U=10.8 mph and M=4.0% moisture content
ER = 80%

ii. EF = 0.00014 PM, 0.000046 PM_{10}, Table 11.19.2-2 (each conveyor transfer point)
ER = 0%

iii. EF = 0.0022 PM, 0.00074 PM_{10}, Table 11.19.2-2 (each screen)
ER = 0%

EFs for crushing, conveyor transfer points and screening are based on controlled emissions. Therefore, each ER will be equal to zero (0) for those material handling operation types, when using the above equation for calculating emissions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117956]

b. Emission Limitation (Mill scale processing plant):

Visible emissions of fugitive dust shall not exceed 10 percent opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the limitation for visible emissions of fugitive dust shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117956]

g) Miscellaneous Requirements

(1) The diesel engine, used to power this emissions unit, qualifies as a non-road, non-stationary stationary engine. When in service, the engine is regularly moved through the facility, not remaining stationary at one location within the facility for a period of more than 12 months.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117956]

6. F006, Portable Screen

Operations, Property and/or Equipment Description:

Portable Aggregate Screening Plant

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI P0117792, issued 11/5/2014)	Particulate emissions (PE) shall not exceed 1.4 tons/yr and particulate matter less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 0.5 ton/yr.
b.	OAC rule 3745-17-07(B)(1) (Applicable rule when the portable plant has relocated within the geographical areas specified in appendix A of OAC rule 3745-17-08)	Visible emissions of fugitive dust shall not exceed 20 percent opacity, as a 3-minute average.
c.	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)b through b)(2)d.

(2) Additional Terms and Conditions

a. The operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

i. Hopper
ii. Screen
iii. Conveyors and associated transfer points

b. The permittee shall employ best available control measures for the above-identified operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the submitted permit application, the permittee has committed to perform the following control measure to ensure compliance:

Operations:
Hopper,screen, conveyors and associated transfer points

Control measures:
Minimize drop heights at the hopper and apply sufficient water, as needed, to control dust

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

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

d. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit are appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

Operation(s)	Minimum inspection frequency
Hopper	daily, when operating
Screen	daily, when operating
Conveyers and associated transfer points	daily, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

(2) The above-mentioned inspections shall be performed during representative, normal operating conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

(3) The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

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

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

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

c. the dates the control measure(s) was (were) implemented; and

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

e) Reporting Requirements

(1) The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

PE shall not exceed 1.4 tons/yr and PM_{10} emissions shall not exceed 0.5ton/yr.

Applicable Compliance Method:

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 11.19.2 (8/04) and Section 13.2.4 (11/06) listed below as follows:

$$\mathrm{E(tons/yr)} = \left(\frac{1}{2000}\right) \text{ x } \sum_{i}^{n} \mathrm{EF \text{ x } PWR} \text{ x } \left(1 - \frac{\mathrm{ER}}{100}\right)$$

where:

E = emission rate (tons/yr), summation of emissions from all operations listed in b)(2)a;

i = operation type;
n = number of operations;
PWR = process weight rate, in tons per year, for each operation type listed in b)(2)a;
ER = overall emission reduction efficiency, in %, for each operation type listed in b)(2)a; and

EF = emission factor from AP-42, in lb/ton, for each operation type listed in b)(2)a. EFs are listed below (or use most recent versions):

i. EF = 0.0024 PM, 0.00115 $PM_{10,}$ (load-in at Hopper)

Section 13.2.4, Eqn. 1
where U=10.8 mph and M=4.0% moisture content
ER = 80%

ii. EF = 0.00014 PM, 0.000046 PM_{10}, Table 11.19.2-2 (each conveyor transfer point, controlled EFs)
ER = 0%

iii. EF = 0.0022 PM, 0.00074 PM_{10}, Table 11.19.2-2 (each screen, controlled EFs)
ER = 0%

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

b. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the limitation for visible emissions of fugitive dust shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

g) Miscellaneous Requirements

(1) At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) or permit to install and operate (PTIO) providing the appropriate exemption requirements have been met. The director may issue a "Notice of Site Approval" for either of the following situations: the permittee notifies the director a minimum of 30 days prior to relocating pursuant to OAC rule 3745-31-03(A)(1)(p)(i); or the permittee identifies pre-disclosed location(s) that meet the criteria found in OAC rule 3745-31-05(H).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

(2) Pursuant to OAC rules 3745-31-03(A)(1)(p)(i), 3745-31-03(A)(1)(p)(ii), and 3745-31-05(H), the following criteria must be met for all portable facilities seeking approval for relocation:

a. the portable source must possess an issued permit to install (PTI) or permit to install and operate (PTIO) and demonstrate continuing compliance with any applicable best available technology determination and state and/or federal air pollution rule or law; and,

b. the portable source is operating pursuant to a currently effective PTI, PTIO and/or any applicable permit to operate (PTO) and demonstrates continuing compliance with the requirements of the permit(s).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

(3) In order to relocate a portable source in accordance with OAC rule 3745-31-03(A)(1)(p)(i) (i.e. the 30-day option), the following additional criteria must be met:

a. the permittee has provided proper notice of intent to relocate the portable source to the permitting District Office/Local air agency a minimum of thirty days prior to the scheduled relocation;

b. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the emissions would not cause a nuisance in violation of OAC rule 3745-15-07, and that the relocation of the portable source would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and

c. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07, and that the relocation will not result in the installation or the modification of a major stationary source.

Using the 30-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval".

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

(4) In order to relocate a portable source in accordance with OAC rules 3745-31-03(A)(1)(p)(ii) and 3745-31-05(H) (i.e. the 15-day option), the following additional criteria must be met:

a. the portable source owner has identified the proposed site(s) to the permitting District Office/Local air agency;

b. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s);

c. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);

d. a public notice, consistent with OAC Chapter 3745-47, has been published in the county where the proposed site(s) is/are located;

e. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

Using the 15-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval", and following submittal of the 15-day written notice of the relocation. Any site approvals issued pursuant to OAC rule 3745-31-05(H) shall be valid for no longer than 3 years and are subject to renewal. Also, pursuant to OAC rule 3745-31-07(D)(2), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

(5) Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

(6) When a portable source is co-located at a stationary source, or is co-located with multiple portable sources, potential emissions from the portable source may be required to be combined for facility potential to emit calculations for Title V and PSD applicability. If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01(NNN) and (LLL), the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source. Relocation of any portable source that results in the

creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC Chapter 3745-77, which may include the requirement to apply for a Title V permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117792]

7. F007, Portable Storage

Operations, Property and/or Equipment Description:

Portable Plant Aggregate Storage Piles

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
load-in and load-out of storage piles, wind erosion of storage piles and truck loading operations (loading materials in trucks)		
a.	OAC rule 3745-31-05(A)(3) (PTI: P0117791, issued 11/5/2014)	Particulate emissions (PE) shall not exceed 3.0 tons/yr and particulate matter less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 1.1 tons/yr from load-in and load-out of storage piles, wind erosion of storage piles and truck loading operations.
load-in and load-out of storage piles, and wind erosion of storage piles		
b.	OAC rule 3745-31-05(A)(3) (PTI: P0117791, issued 11/5/2014)	No visible particulate emissions except for a period of time not to exceed 1 minute during any 60-minute observation period. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a through b)(2)f and b)(2)i.
c.	OAC rule 3745-17-07(B)(6),OAC rule 3745-17-07(B)(8)(b) andOAC rule 3745-17-07(B)(8)(d)	The emission limitations required by these applicable rulesare less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Appendix A of OAC rule 3745-17-08)	through b)(2)f.
truck loading operations (loading materials in trucks)		
e.	OAC rule 3745-17-07(B)(8)(b) and OAC rule 3745-17-07(B)(1) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	Visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average. (truck loading operations: loading materials in trucks)
f.	OAC rule 3745-17-08(B) (applicable only if this emissions unit is located in an area identified in Appendix A of OAC rule 3745-17-08)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)g through b)(2)h.

(2) Additional Terms and Conditions

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

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

b. 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.

c. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the application, the permittee has committed to perform one or more of the following: chemical stabilization/dust suppressants or watering/sprinkling systems to ensure compliance.

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

d. 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.

e. The permittee shall employ best available control measures on all working operations on top of storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to employ precautionary operating practices and/or treat the pile working operations with watering at sufficient treatment frequencies to ensure compliance.

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

f. The above-mentioned control measure(s) shall be employed for working operations on top of each storage piles 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.

g. The permittee shall employ reasonably available control measures on all truck loading operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to maintain minimal drop heights for front-loaders to ensure compliance. The operator shall avoid dragging any front-end loader bucket along the ground.

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

h. The above-mentioned control measure(s) shall be employed for each truck loading operation 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.

i. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit are appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

storage pile identification	minimum load-in inspection frequency
all	from May 1 to September 30: daily, when operating from October 1 to April 30: weekly, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

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

storage pile identification	minimum load-out inspection frequency
all	from May 1 to September 30: daily, when operating from October 1 to April 30: weekly, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

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

storage pile identification	minimum wind erosion inspection frequency
all	from May 1 to September 30: daily, when operating from October 1 to April 30: weekly, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117791]

(4) Except as otherwise provided in this section, the permittee shall perform inspections of working operations on top of each storage piles (compacting, grading or transporting materials) in accordance with the following frequencies:

storage pile identification:	minimum working pile inspection frequency:
all	from May 1 to September 30: daily, when operating from October 1 to April 30: weekly, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

(5) Except as otherwise provided in this section, the permittee shall perform inspections of loading materials in trucks at each truck loading area in accordance with the following frequencies:

truck loading area identification	minimum truck loading inspection frequency
all	from May 1 to September 30: daily, when operating from October 1 to April 30: weekly, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

(6) 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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

(7) 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, wind erosion from the surface of a storage pile, working pile operations, and truck loading (loading materials into trucks). The inspections shall be performed during representative, normal storage pile operating conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117791]

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

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

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

c. the dates the control measures were implemented; and

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

(9) The information required in d)(8)d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, (iii) the pile surfaces (wind erosion), (iv) working pile operations, and (v) truck loading operations and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

e) Reporting Requirements

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitations (load-in and load-out operation of storage piles)</u>:

No visible particulate emissions except for a period of time not to exceed 1 minute during any 60-minute observation period. (load-in and load-out from storage piles)

No visible particulate emissions except for a period of time not to exceed 1 minute during any 60-minute observation period. (wind erosion from storage piles)

Visible emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average. (truck loading operations: loading materials in trucks)

<u>Applicable Compliance Method</u>:

If required, compliance with the limitations for visible emissions of fugitive dust shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 9 and 22 and OAC rule 3745-17-03(B)(3)(d).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

b. Emission Limitation:

PE shall not exceed 3.0 tons/yr and PM_{10} emissions shall not exceed 1.1 tons/yr from load-in and load-out of storage piles, wind erosion of storage piles and truck loading operations.

Applicable Compliance Method:

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 13.2.4 (11/06) and US EPA document "Control of Open Fugitive Dust" (9/88) as follows:

$$\mathrm{E(tons/yr)} = \left(\frac{1}{2000}\right) \mathrm{x} \sum_{i}^{n} \mathrm{EF\ x\ PWR\ x} \left(1 - \frac{\mathrm{ER}}{100}\right) + \left(\frac{1}{2000}\right) \mathrm{x} \sum_{j}^{m} \mathrm{EF(2) x\ Acres\ x\ Duration\ x} \left(1 - \frac{\mathrm{ER}}{100}\right)$$

where:

E = emission rate (tons/yr), summation of emissions from all load-in, load-out operations, truck loading and wind erosion;

i = each storage pile operation type (i.e., load-in, load-out and truck loading);
n = number of storage pile operation types;
PWR = process weight rate, in tons per year, for each storage pile operation type (i.e., load-in, load-out and truck loading);
ER = overall emission reduction efficiency, in % (ER = 80%);
EF = emission factor from AP-42, in lb/ton, for each storage pile operation type;

EF(2) = emission factor for wind erosion from USEPA, "Control of Open Fugitive Dust", in lb/day/acre, for each storage pile;
Acres = size of storage pile, in acres;
Duration = average time of each material stored, in days;
j = each storage pile, acres of each pile and duration of each materials stored; and
m = number of storage piles.

EFs are listed below (or use most recent versions):

i. $$EF = k(0.0032)\left[\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}\right]$$

e) AP-42, section 13.2.4, Eq 1,

where:

EF = emission factor, for load-in operations, (lb/ton);

k = particle size multiplier for particulate (dimensionless): TSP = 0.74 and PM_{10} = 0.35;
U = mean wind speed, mph = 10.8; and
M = material moisture content.

ii. $$EF = k(0.0032)\left[\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}\right]$$

AP-42, section 13.2.4, Eq 1, (load-out operations)

where:

EF = emission factor, for load-out operations, (lb/ton);
k = particle size multiplier for particulate (dimensionless): TSP = 0.74 and PM_{10} = 0.35;
U = mean wind speed, mph = 10.8; and
M = material moisture content.

iii. $$EF = k(0.0032)\left[\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}}\right]$$

AP-42, section 13.2.4, Eq 1, (truck loading)

where:

EF = emission factor, for load-out operations, (lb/ton);
k = particle size multiplier for particulate (dimensionless): TSP = 0.74 and PM_{10} = 0.35;
U = mean wind speed, mph = 10.8; and
M = material moisture content.

iv. $$EF(2) = 1.7\left[\left(\frac{s}{1.5}\right)\left(\frac{365-p}{235}\right)\left(\frac{f}{15}\right)\right]$$

g) USEPA, Control of Open Fugitive

where:

EF(2) = emission factor, for wind erosion (lb/day/acre);
s = surface material silt content, in %;
p = number of days with > 0.01 in. of precipitation, p = 158;
f = percentage of time that the unobstructed wind speed exceeds 12 mph at the mean height , % f = 30; and
50.0% TSP = PM_{10}.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

g) Miscellaneous Requirements

(1) At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) or permit to install and operate (PTIO) providing the appropriate exemption requirements have been met. The director may issue a "Notice of Site Approval" for either of the following situations: the permittee notifies the director a minimum of 30 days prior to

relocating pursuant to OAC rule 3745-31-03(A)(1)(p)(i); or the permittee identifies pre-disclosed location(s) that meet the criteria found in OAC rule 3745-31-05(H).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

(2) Pursuant to OAC rules 3745-31-03(A)(1)(p)(i), 3745-31-03(A)(1)(p)(ii), and 3745-31-05(H), the following criteria must be met for all portable facilities seeking approval for relocation:

a. the portable source must possess an issued permit to install (PTI) or permit to install and operate (PTIO) and demonstrate continuing compliance with any applicable best available technology determination and state and/or federal air pollution rule or law; and,

b. the portable source is operating pursuant to a currently effective PTI, PTIO and/or any applicable permit to operate (PTO) and demonstrates continuing compliance with the requirements of the permit(s).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

(3) In order to relocate a portable source in accordance with OAC rule 3745-31-03(A)(1)(p)(i) (i.e. the 30-day option), the following additional criteria must be met:

a. the permittee has provided proper notice of intent to relocate the portable source to the permitting District Office/Local air agency a minimum of thirty days prior to the scheduled relocation;

b. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the emissions would not cause a nuisance in violation of OAC rule 3745-15-07, and that the relocation of the portable source would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and

c. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07, and that the relocation will not result in the installation or the modification of a major stationary source.

Using the 30-day option, the portable source may only be relocated upon receipt of the “Notice of Site Approval”.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117791]

(4) In order to relocate a portable source in accordance with OAC rules 3745-31-03(A)(1)(p)(ii) and 3745-31-05(H) (i.e. the 15-day option), the following additional criteria must be met:

a. the portable source owner has identified the proposed site(s) to the permitting District Office/Local air agency;

b. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s);

c. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);

d. a public notice, consistent with OAC Chapter 3745-47, has been published in the county where the proposed site(s) is/are located;

e. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

Using the 15-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval", and following submittal of the 15-day written notice of the relocation. Any site approvals issued pursuant to OAC rule 3745-31-05(H) shall be valid for no longer than 3 years and are subject to renewal. Also, pursuant to OAC rule 3745-31-07(D)(2), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117791]

(5) Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTIP0117791]

(6) When a portable source is co-located at a stationary source, or is co-located with multiple portable sources, potential emissions from the portable source may be required to be combined for facility potential to emit calculations for Title V and PSD applicability. If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01(NNN) and (LLL), the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC Chapter 3745-77, which may include the requirement to apply for a Title V permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117791]

8. F010, Drop Ball Operation

Operations, Property and/or Equipment Description:

Multiple Drop Ball Operations

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI: P0107417, issued 2/3/2011)	Particulate emissions (PE) shall not exceed 3.8tons/yr. Particulate Matter less than 10 micrometers in diameter (PM_{10}) shall not exceed 1.9 tons/yr. See b)(2)e. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissionsof fugitive dust. See b)(2)b through b)(2)d.
b.	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visibleemissions of fugitive dust.See b)(2)b through b)(2)d.
(drop ball)		
c.	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20 percent opacity, as a 3-minute average.
(load-in/ load-out in cutting areas and truck loading)		
d.	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20 percent opacity, as a 3-minute average.

(2) Additional Terms and Conditions

a. The operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

i. Drop ball
ii. Loading and removal (load-in/ load-out) of materials in drop ball areas
iii. Truck loading

b. The permittee shall employ best available control measures for the above-identified operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the submitted permit application, the permittee has committed to perform the following control measure to ensure compliance:

Operations:
Drop ball

Control measures:
Use water, when needed

Operations:
Loading and removal (load-in/ load-out) of materials in drop ball areas, and truck loading

Control measures:
Minimize drop heights

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

c. For each material handling operation that is not adequately enclosed, the above-identified control measure shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure is necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure shall continue during the operation of the material handling operations until further observation confirms that use of the control measure is unnecessary.

d. Implementation of the above-mentioned control measure(s) in accordance with the terms andconditions of this permit are appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

e. The annual emission limitations are based upon the potential to emit of this emissions unit and therefore no record keeping and reporting requirements of those limitations are necessary.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

Operation(s)	Minimum inspection frequency
Drop ball	daily, when operating
Loading and removal (load-in/ load-out) of materials in drop ball areas, and truck loading	daily, when operating

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0107417]

(2) The above-mentioned inspections shall be performed during representative, normal operating conditions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0107417]

(3) The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0107417]

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

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

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

c. the dates the control measure(s) was (were) implemented; and

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0107417]

e) Reporting Requirements

(1) The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

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

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0107417]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation (Drop ball, load-in, load-out and truck loading)</u>:

Particulate emissions (PE) shall not exceed 3.8 tons/yr.

Particulate Matter less than 10 micrometers in diameter (PM_{10}) shall not exceed 1.9 tons/yr.

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated by applying the emission factors from AP-42, Section 11.19.2 (8/04) and the drop ball EFs listed below as follows:

$$\mathrm{E(tons/yr)} = \left(\frac{1}{2000}\right) \text{ x } \sum_{i}^{n} \mathrm{EF \text{ x } PWR \text{ x }} \left(1 - \frac{\mathrm{ER}}{100}\right)$$

where:

E = emission rate (tons/yr), summation of emissions from all operations listed in b)(2)a;

i = operation type;
n = number of operations;
PWR = process weight rate, in tons per year, for each operation type listed in b)(2)a;
ER = overall emission reduction efficiency, in %, for each operation type listed in b)(2)a; and

EF = emission factor from AP-42, in lb/ton, and emission factor from emissions estimation, in lb/ton, for each operation type listed in b)(2)a. EFs are listed below (or use most recent versions):

EF = 0.1 PM, 0.05 $PM_{10,}$, emissions estimation, (drop ball), ER = 50%

EF = 0.0001 PM, 0.0001 $PM_{10,}$ (use EFs for truck loading, loading at drop ballareas, and removal from drop ball areas)Table 11.19.2-2 (truck unloading – conveyor, crushed stone), ER = 80%

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0107417]

b. Emission Limitation (Drop ball, load-in, load-out and truck loading):

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

Applicable Compliance Method:

If required, compliance with the limitation for visible emissions of fugitive dust shall be demonstrated through visible emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0107417]

g) Miscellaneous Requirements

(1) None.

9. F012, Portable Roads

Operations, Property and/or Equipment Description:

Portable Plant unpaved roadways and parking areas

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI: P0117793, issued 11/5/2014)	Particulate emissions (PE) shall not exceed 4.4 tons/yr and particulate matter less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 1.3tons/yr from unpaved roadways and parking areas. No visible particulate emissions from anyunpaved roadway or parkingarea except for a period of time not to exceed thirteen (13) minutes during any 60-minuteobservation period. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a through b)(2)f.
b.	OAC rule 3745-17-07(B)(8)(a) (when operating at Republic Steel in Lorain)	Visible emissions of fugitive dust from any unpavedroadway or parking area shallnot exceed ten(10) percent opacity, averaged over a data set consisting of twelveobservations based on four uninterruptedvehicle passes, three observations pervehicle pass.
c.	OAC rule 3745-17-07(B)(5)	The emission limitation required by this applicable rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rules 3745-17-08(B), 3745-17-	The permittee shall employ reasonably

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	08(B)(2), 3745-17-08(B)(7) and3745-17-08(B)(9)	available control measuresthat are sufficient to minimize or eliminatevisible emissions of fugitive dust. See b)(2)a through b)(2)f.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures on all unpaved roadways and parking areas and all paved 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 at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for an 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.

c. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using appropriate dust control measures for paved surfaces. 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

d. 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.

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

f. Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit are appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08and 3745-31-05.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

unpaved roadways:	minimum inspection frequency:
all	from May 1 to September 30: daily, when in use from October 1 to April 30: weekly, when in use

unpaved parking areas:	minimum inspection frequency:
all	from May 1 to September 30: daily, when in use from October 1 to April 30: weekly, when in use

paved roadways:	minimum inspection frequency:
all	from May 1 to September 30: daily, when in use from October 1 to April 30: weekly, when in use

paved parking areas:	minimum inspection frequency:
all	from May 1 to September 30: daily, when in use from October 1 to April 30: weekly, when in use

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

(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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

(3) The permittee may, upon receipt of written approval from the Ohio EPA, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

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

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

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

c. the dates the control measures were implemented; and

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

The information required in d)(4)d shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

e) Reporting Requirements

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

The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

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

Visible emissions of fugitive dust from any unpavedroadway or parking area shallnot exceed ten(10) percent opacity, averaged over a data set consisting of twelveobservations based on four uninterruptedvehicle passes, three observations per vehicle pass (when relocated at Republic Steel in Lorain).

Applicable Compliance Method:

If required, compliance with the limitations for visible emissions of fugitive dust shall be demonstrated based upon visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(3)(d).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

b. Emission Limitation:

No visible particulate emissions from anyunpaved roadway or parkingarea except for a period of time not to exceed thirteen (13) minutes during any 60-minuteobservation period. [when relocated in an area identified in Appendix A of OAC rule 3745-17-08]

Applicable Compliance Method:

If required, compliance with the visible PE limitation listed above shall be demonstrated 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.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

c. Emission Limitation:

PE shall not exceed 4.4 tons/yr and PM_{10} emissions shall not exceed 1.3 tons/yr from unpaved roadways and parking areas.

Applicable Compliance Method:

Compliance shall be demonstrated by using the following equation:

$$EF = k\left[\left(\frac{s}{12}\right)^{a}\right] x \left[\left(\frac{W}{3}\right)^{b}\right] x \left[\frac{(365-P)}{365}\right]$$

AP-42 section 13.2.2., Eq. 2 (11/06)

where:

EFs are listed below (or use most recent versions):

EF = annual sized-specific emission factor, lb/VMT;
k = (empirical constants, lb/VMT), TSP = 4.9, PM_{10} = 1.5;
s = surface material silt content (%), s = 10.2%;
W = mean vehicle weight (tons), W = 40 tons;
a = (empirical constants), TSP = 0.7, PM_{10} = 0.9;
b = (empirical constants), TSP = 0.45, PM_{10} = 0.45; and
P = number of days with > 0.01 in. of precipitation, 158.

$$EF(PE) = 4.9\,x\left[\left(\frac{10.2}{12}\right)^{0.7} x\left(\frac{40}{3}\right)^{0.45}\right] x\left[1 - \frac{158}{365}\right] = 8.0\,lbs\frac{PE}{VMT}$$

$$EF(PM10) = 1.5\,x\left[\left(\frac{10.2}{12}\right)^{0.9} x\left(\frac{40}{3}\right)^{0.45}\right] x\left[1 - \frac{158}{365}\right] = 2.4\,lbs\frac{PM10}{VMT}$$

The calculated emission factor (EF) shall be multiplied by the total miles traveled (in miles/yr), and by applying a control efficiency of 80% for the application of water (1 - 0.80) and divided by 2,000 lbs/ton, annual estimated emissions shall be calculated as follows:

$$Annualemissions(PE) = \left(8.0\frac{lbs}{mi}\right) x\left(\frac{miles}{yr}\right) x(1 - 0.80) x\left(\frac{1}{2000}\right)$$

$$Annualemissions(PM10) = \left(2.4\frac{lbs}{mi}\right) x\left(\frac{miles}{yr}\right) x(1 - 0.80) x\left(\frac{1}{2000}\right)$$

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

g) Miscellaneous Requirements

(1) At the discretion and following the approval of the director, the permittee may relocate the portable source within the State of Ohio without first obtaining a permit to install (PTI) or permit to install and operate (PTIO) providing the appropriate exemption requirements have been met. The director may issue a "Notice of Site Approval" for either of the following situations: the permittee notifies the director a minimum of 30 days prior to relocating pursuant to OAC rule 3745-31-03(A)(1)(p)(i); or the permittee identifies pre-disclosed location(s) that meet the criteria found in OAC rule 3745-31-05(H).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

(2) Pursuant to OAC rules 3745-31-03(A)(1)(p)(i), 3745-31-03(A)(1)(p)(ii), and 3745-31-05(H), the following criteria must be met for all portable facilities seeking approval for relocation:

a. the portable source must possess an issued permit to install (PTI) or permit to install and operate (PTIO) and demonstrate continuing compliance with any applicable best available technology determination and state and/or federal air pollution rule or law; and,

b. the portable source is operating pursuant to a currently effective PTI, PTIO and/or any applicable permit to operate (PTO) and demonstrates continuing compliance with the requirements of the permit(s).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

(3) In order to relocate a portable source in accordance with OAC rule 3745-31-03(A)(1)(p)(i) (i.e. the 30-day option), the following additional criteria must be met:

a. the permittee has provided proper notice of intent to relocate the portable source to the permitting District Office/Local air agency a minimum of thirty days prior to the scheduled relocation;

b. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the emissions would not cause a nuisance in violation of OAC rule 3745-15-07, and that the relocation of the portable source would not result in the installation of a major stationary source or a modification of an existing major stationary source at the new site; and

c. the director has issued a "Notice of Site Approval", stating that the proposed site is acceptable under OAC rule 3745-15-07, and that the relocation will not result in the installation or the modification of a major stationary source.

Using the 30-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval".

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

(4) In order to relocate a portable source in accordance with OAC rules 3745-31-03(A)(1)(p)(ii) and 3745-31-05(H) (i.e. the 15-day option), the following additional criteria must be met:

a. the portable source owner has identified the proposed site(s) to the permitting District Office/Local air agency;

b. the owner of the proposed site(s) (if not the permittee) has provided the portable source owner with approval, or an equivalent declaration, that it is acceptable to move the portable source to the proposed site(s);

c. the permitting District Office/Local air agency and the District Office/Local air agency having jurisdiction over the new site have determined that the portable source will have an acceptable environmental impact at the proposed site(s);

d. a public notice, consistent with OAC Chapter 3745-47, has been published in the county where the proposed site(s) is/are located;

e. the permittee has provided the Ohio EPA with a minimum of a 15-day written notice of the relocation.

Using the 15-day option, the portable source may only be relocated upon receipt of the "Notice of Site Approval", and following submittal of the 15-day written notice of the relocation. Any site approvals issued pursuant to OAC rule 3745-31-05(H) shall be valid for no longer than 3 years and are subject to renewal. Also, pursuant to OAC rule 3745-31-07(D)(2), the director may modify the site approval to add or delete certain portable sources or add or delete certain terms and conditions as appropriate.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

(5) Failure to submit said notification or failure to receive Ohio EPA approval prior to relocation of the portable source may result in fines and civil penalties.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]

(6) When a portable source is co-located at a stationary source, or is co-located with multiple portable sources, potential emissions from the portable source may be required to be combined for facility potential to emit calculations for Title V and PSD applicability. If the relocation of the portable source would result in the installation of a major source or the modification of a major source, as defined in OAC rule 3745-31-01(NNN) and (LLL), the permittee shall submit an application and obtain a PTI for the new location prior to moving the portable source. Relocation of any portable source that results in the creation of a major source, as defined in OAC rule 3745-77-01, must also meet all applicable requirements under the Title V program contained in OAC Chapter 3745-77, which may include the requirement to apply for a Title V permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0117793]