



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

9/4/2009

Lindon Pierce
Cleveland Bulk Terminal - Carmeuse Lime and Stone
1967 W CR 42
PO Box 708
Bettsville, OH 44815-0708

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 1318006458
Permit Number: P0104636
Permit Type: OAC Chapter 3745-31 Modification
County: Cuyahoga

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of \$70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions regarding this permit, please contact the Cleveland Division of Air Quality. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

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

Cc: CDAQ

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

FINAL

**Air Pollution Permit-to-Install and Operate
for
Cleveland Bulk Terminal - Carmeuse Lime and Stone**

Facility ID: 1318006458
Permit Number: P0104636
Permit Type: OAC Chapter 3745-31 Modification
Issued: 9/4/2009
Effective: 9/4/2009
Expiration: 6/23/2019



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install and Operate
for
Cleveland Bulk Terminal - Carmeuse Lime and Stone

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Final Permit-to-Install and Operate
Permit Number: P0104636
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Authorization

Facility ID: 1318006458
Application Number(s): A0036862
Permit Number: P0104636
Permit Description: This is a Chapter 31 modification for storage piles (vessel unloading, wind erosion, and railcar loading) to increase acceptable silt content of limestone from 2% to 20%.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$1,250.00
Issue Date: 9/4/2009
Effective Date: 9/4/2009
Expiration Date: 6/23/2019
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Cleveland Bulk Terminal - Carmeuse Lime and Stone
5400 WHISKEY ISLAND
Cleveland, OH 44102

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

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

Cleveland Division of Air Quality
2nd Floor
75 Erievue Plaza
Cleveland, OH 44114
(216)664-2297

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate
Permit Number: P0104636
Facility ID: 1318006458
Effective Date: 9/4/2009

Authorization (continued)

Permit Number: P0104636
Permit Description: This is a Chapter 31 modification for storage piles (vessel unloading, wind erosion, and railcar loading) to increase acceptable silt content of limestone from 2% to 20%.

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

Emissions Unit ID:	F003
Company Equipment ID:	Material Handling/ship unloading and rail car loading
Superseded Permit Number:	13-04611
General Permit Category and Type:	Not Applicable



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Final Permit-to-Install and Operate

Permit Number: P0104636

Facility ID: 1318006458

Effective Date: 9/4/2009

A. Standard Terms and Conditions



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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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



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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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



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Final Permit-to-Install and Operate

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change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

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

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

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

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B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

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Effective Date: 9/4/2009

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.



State of Ohio Environmental Protection Agency
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Final Permit-to-Install and Operate

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C. Emissions Unit Terms and Conditions



1. F003, Material Handling/ship unloading and rail car loading

Operations, Property and/or Equipment Description:

Vessel unloading of; Taconite, iron ore concentrate and crushed limestone material into storage piles, wind erosion, and railcar loading.

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Vessel unloading of Taconite, iron ore concentrate and crushed limestone material into storage piles	
a.	OAC rule 3745-31-05(E)	1.44 TPY of fugitive PM ₁₀ See b)(2)c. below
b.	OAC rule 3745-17-07(B)(1)	Visible emissions of fugitive dust shall not exceed 20 percent opacity as a three-minute average.
c.	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)e. through b)(2)g.).
	Wind erosion from storage piles (see b)(2)a. for identification of storage piles)	
d.	OAC rule 3745-31-05(E)	3.23 TPY of fugitive PM ₁₀



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)c. below
e.	OAC rule 3745-17-07(B)(6)	Visible particulate emissions shall not exceed thirteen minutes during any sixty-minute observation period.
f.	OAC rule 3745-17-08(B), (B)(6)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)e. through b)(2)g.).
Taconite, limestone and iron ore concentrate material railcar loading		
g.	OAC rule 3745-31-05(A)(3)	0.52 TPY of fugitive PM ₁₀ See b)(2)c. below.
h.	OAC rule 3745-17-07(B)(1)	Visible emissions of fugitive dust shall not exceed 20 percent opacity as a three-minute average
i.	OAC rule 3745-17-08(B)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see b)(2)e. through b)(2)g.).

(2) Additional Terms and Conditions

- a. The storage piles that are covered by this permit and subject to the above-mentioned requirements are:
 - i. Taconite pellet piles;
 - ii. iron ore concentrate piles; and
 - iii. crushed limestone piles.
- b. The material handling operation(s) that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:
 - i. unloading from Great Lakes vessel of Taconite, iron ore concentrate and crushed limestone; and
 - ii. front end loading of Taconite, iron ore concentrate and crushed limestone into rail cars.
- c. Permit to Install and Operate P0104636 for this air contaminant source takes into account the following voluntary restrictions (including use of any applicable air



pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. the use of water spray to reduce fugitive dust;
 - ii. silt content limitations as specified in c)(2) and c)(3) below; and
 - iii. annual throughput limitations as specified in c)(1).
- d. The “Best Available Technology (BAT)” requirements under OAC rule 3745-31-05(A)(3)(a) are not applicable to the particulate emissions (PE) emitted from this emissions unit (PE is emitted in the form of filterable PM₁₀ emissions). BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant without an established NAAQS.
- e. 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 permittee’s permit application, the permittee has committed to the use of water for both the Taconite ore piles, crushed limestone piles and a surface crusting agent for the iron ore concentrate piles as the type of dust suppressants to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

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(s):	Control measure(s):
vessel unloading	water or other suitable dust suppressant
railcar loading of Taconite pellets, crushed limestone material, and iron ore concentrate	minimize drop height from front-end loader

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 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.

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

- g. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

c) Operational Restrictions

- (1) The maximum annual material processing rate for material handling operations shall not exceed the limitations identified below, based upon a rolling, 12-month summation of the monthly processing rates:

Unloading from vessels	Loading of railcars
4.9 million tons of Taconite pellets	1.2 million tons of Taconite pellets
640,000 tons of iron ore concentrate	640,000 tons of iron ore concentrate
2.0 million tons of crushed limestone	2.0 million tons of crushed limestone

The permittee has historical data to demonstrate compliance with the above limitations; therefore, the initial 12-month operating limitations are not needed.

- (2) The permittee shall handle only Taconite pellets which have been screened and washed prior to receipt, and have a maximum silt content of 4.0 %. If the results of a 28 mesh screen test are less than 4%, compliance with the silt content shall be assumed. If the results of a 28 mesh screen test exceed 4%, the material must be evaluated using the ASTM C-136 test method.
- (3) The permittee shall handle only crushed limestone having a maximum silt content of 20.0 %, using the ASTM C-136 test method.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform daily inspections of the wind erosion from pile surfaces associated with each storage pile.



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
vessel unloading	daily
front end rail car loading	daily

- (2) 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.
- (3) The above-mentioned inspections shall be performed during representative, normal operating conditions and does not include weekends and holidays or other non-operational times.
- (4) The purpose of these inspections is to determine the need for implementing the control measure specified in this permit for wind erosion from the surface of a storage pile and the material handling operations. The inspections shall be performed during representative, normal storage pile operating conditions.
- (5) The permittee may, upon receipt of written approval from the Cleveland Division of Air Quality, 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.
- (6) The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in d)(6)d. shall be kept separately for each material handling operation and the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.



- (7) The permittee shall maintain records of the monthly acreage of the storage piles for the purposes of the wind erosion calculations in f)(1)d. below.
 - (8) The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the separate amounts of Taconite, iron ore concentrate and crushed limestone material processed for the vessel unloading and railcar loading operations, in tons, for each month;
 - b. the rolling 12-month summation of the monthly Taconite, iron ore concentrate and crushed limestone material processing rates, in tons;
 - c. the silt content of the iron ore concentrate and crushed limestone material based upon results of the ASTM C-136 test method; and
 - d. the percentage of Taconite material passing through a 28 mesh screen test and the results of the ASTM C-136 test if required as described in c)(2).
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- f) Testing Requirements
- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
Visible emissions of fugitive dust from vessel unloading shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).
 - b. Emission Limitation:
1.44 TPY of fugitive dust (PM₁₀) emissions from vessel unloading of Taconite, iron ore concentrate and crushed limestone material

Applicable Compliance Method:
Compliance shall be determined using equation 1 taken from the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 13.2.4 (1/95), in which particulate emission factors for Taconite (0.002 lb per ton of material transferred), iron ore concentrate (0.0008 lb per ton of material transferred) and crushed limestone (0.0006 lb per ton of material



transferred) were established. Each emission factor is multiplied by the actual annual material throughput, in tons, and the control efficiency of the water sprayers (1-0.75). The summation of the calculated emission rates represent the total emission rate of this activity within this emissions unit. Divide the total by 2000 lbs/ton to convert to tons per year.

- c. **Emission Limitation:**
 There shall be no visible particulate emissions of fugitive dust from material storage piles except for 13 minutes during any 60-minute observation period.

Applicable Compliance Method:
 Compliance with the visible emission limitation for the material storage piles areas identified in this permit shall be determined in accordance with U.S. EPA Method 22 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

- d. **Emission Limitation**
 6.46 TPY of fugitive dust (PM₁₀) emissions from wind erosion

Applicable Compliance Method:
 Compliance with the TPY emission limitation shall be determined based on calculations using the following equation from the U.S. EPA document "Control of Fugitive Dust Sources", September 1988.

$$E = 1.7 \times (s/1.5) \times [(365-p)/235] \times (f/15)$$

E = Total suspended PE (lb/day/acre)
 s = silt content
 p = # of days with > 0.01 inches of precipitation
 f = % of time wind speed exceeds 12 mph
 PM₁₀ = PM lbs/day x 0.5

The above emission limits were based on the following assumptions.
 Maximum storage surface area less than or equal to 18 acres
 90 % overall control efficiency
 s = average of 9.03%
 p = 140 days
 f = 30%

- e. **Emission Limitation:**
 Visible emissions of fugitive dust from railcar loading shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:
 Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

- f. **Emission Limitation:**
 0.52 TPY of fugitive dust (PM₁₀) emissions from Taconite, iron ore concentrate and crushed limestone material railcar loading.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install and Operate

Permit Number: P0104636

Facility ID: 1318006458

Effective Date: 9/4/2009

Applicable Compliance Method:

Compliance shall be determined using equation 1 taken from the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 13.2.4 (1/95), in which particulate emission factors for Taconite (0.002 lb per ton of material transferred), iron ore concentrate (0.0008 lb per ton of material transferred) and crushed limestone (0.0006 lb per ton of material transferred) were established. Each emission factor is multiplied by the actual annual material load out, in tons, and the control efficiency through the use of water (1-0.75). The summation of the calculated emission rates represents the total emission rate of this activity within this emissions unit. Divide the total by 2000 lbs/ton to convert to tons per year.

g) **Miscellaneous Requirements**

(1) None.