



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
CUYAHOGA COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 13-04039

DATE: 1/23/2003

Oglebay Norton Cleveland Bulk Terminal
James May
1100 Superior Avenue Suite 2100
Cleveland, OH 441142598

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

CBAPC



**Permit To Install
Terms and Conditions**

**Issue Date: 1/23/2003
Effective Date: 1/23/2003**

FINAL PERMIT TO INSTALL 13-04039

Application Number: 13-04039
APS Premise Number: 1318006458
Permit Fee: **\$1500**
Name of Facility: Oglebay Norton Cleveland Bulk Terminal
Person to Contact: James May
Address: 1100 Superior Avenue Suite 2100
Cleveland, OH 441142598

Location of proposed air contaminant source(s) [emissions unit(s)]:
**5400 Whiskey Island
Cleveland, Ohio**

Description of proposed emissions unit(s):
Modification to storage piles and materials handling PTI -- F003.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) 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 above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. 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, i.e., 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.)

3. Records Retention Requirements

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.

4. 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.

5. Scheduled Maintenance/Malfunction Reporting

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 appropriate Ohio EPA District Office or local air agency 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).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. 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.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

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Facility ID: 1318006458

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. 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. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PE (stack)	0.14
PE (fugitive)	5.62

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	wind erosion from storage piles (see Section A.2.a for identification of storage piles)	<u>Applicable Rules/Requirements</u>
F003 - vessel unloading of Taconite and iron ore concentrate material into storage piles, modification to increase throughput		OAC rule 3745-31-05(A)(3)
		OAC rule 3745-17-07(B)(1)
	Taconite and iron ore concentrate material railcar loading	OAC rule 3745-17-08(B)
		OAC rule 3745-35-07(D)

Synthetic Minor to avoid Title V

Applicable Emissions
Limitations/Control Measures

OAC rule 3745-31-05(A)(3)

OAC rule 3745-17-07(B)(1)

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d).

OAC rule 3745-17-08(B)

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

OAC rule 3745-17-07 (B)(6)

OAC rule 3745-35-07(D)
Synthetic Minor to avoid Title V

The requirements of this rule also include compliance with OAC rule 3745-35-07(D).

OAC rule 3745-17-08 (B), (B)(6)

The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-35-07(D)
Synthetic Minor to avoid Title V

The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-31-05(A)(3)

1.05 TPY of particulate emissions as a rolling, 12-month summation.

No visible emissions except for 1 minute during any 60 minute period

best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see

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Issued: 1/23/2003

Emissions Unit ID: **F003**

Sections A.2.b through A.2.d) .

The requirements of this rule also include compliance with OAC rule 3745-35-07(D).

The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).

2.65 TPY of particulate emissions as a rolling, 12-month summation.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d).

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

The requirements of this rule also include compliance with OAC rule 3745-35-07(D).

The visible particulate emission limitation specified by this rule is less stringent than the visible

particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).

0.51 TPY of particulate emissions as a rolling, 12-month summation.

2. Additional Terms and Conditions

2.a The storage piles that are covered by this permit and subject to the above-mentioned requirements are:

- three taconite ore pellet piles
- two iron ore concentrate pellet piles

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:

- unloading from Great Lakes vessel of Taconite and iron ore concentrate pellets
- front end loading of Taconite and iron ore concentrate pellets into rail cars

2.b 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 the Taconite ore 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 operation(s):	control measure(s):
vessel unloading and rail car	- water or other suitable dust suppressant
loading of iron ore pellets	- minimize drop height from front-end loader

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

- 2.c 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.

- 2.d 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.

B. 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
3.9 million tons of Taconite pellets	1.2 million tons of Taconite pellets
640,000 tons of iron ore concentrated pellets	640,000 tons of iron ore concentrated pellets

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 ore pellets which have been screened and washed prior to receipt, and have a maximum silt content of 4.0 %, using the ASTM C-136 test method.

C. 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 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.
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 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 surface areas of the taconite and iron ore concentrate piles, in acres.
8. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the separate amounts of Taconite and iron ore concentrate 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 and iron ore concentrate material processing rates, in tons; and
 - c. the silt content of the Taconite and iron ore concentrate material based upon results of the ASTM C-136 test method.

D. 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, 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.

2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month Taconite and iron ore material processing rate limitations.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the silt content restriction for the Taconite and iron ore concentrate material.
4. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation -

no visible particulate emissions except for 1 minute during any 60-minute period
(wind erosion of storage piles)

Applicable Compliance Method -

Compliance with the emission limitation for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

- b. Emission Limitation -

2.65 TPY of particulate emissions from wind erosion

Applicable Compliance Method

The TPY emission limitation shall be based on calculations using the equation taken from U.S. EPA's Control of Open Fugitive Dust Sources September 1988 to establish the emission factor in lb/day/acre. The calculated emission factor is 6.22 lbs of particulate emissions/day/acre of materials stored. This emission factor is multiplied by the surface area of the storage piles in acres (based on annual tonnage of taconite material stored), (1-0.87) to account for the 87% watering emission control efficiency. The calculated

value is then divided by 2000 lbs/ton to determine emissions in tons/year.

c. Emission Limitation -

1.05 TPY of particulate emissions from vessel unloading of Taconite and iron ore concentrate 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) and iron ore concentrate (0.0008 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.

d. Emission Limitation -

0.51 TPY of particulate emissions from Taconite and iron ore concentrate material railcar loading

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) and iron ore concentrate (0.0008 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 (1-0.65). 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.

e. Visible emission limitation

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

Applicable Compliance Method

Compliance with the visible emission limitation for the material handling operation(s) identified above shall be determined in accordance with Test Method 9 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)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

F. Miscellaneous Requirements

1. The following special terms and conditions of this permit are federally enforceable: A - F.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, <u>and/or Equipment</u>	fugitive emission points associated with the covered conveyors and conveyor transfer points	fugitive emission points associated with the end drop point of Taconite material into the river shuttle boats
F004 - Taconite material handling operation to load river boats, consisting of an enclosed conveyor system from the storage area with transfer points controlled by water spray scrubbers and baghouses.		

Applicable Rules/Requirements

OAC rule 3745-31-05(A)(3)

OAC rule 3745-35-07(D)
Synthetic Minor to avoid Title V

OAC rule 3745-17-07(B)(1)

OAC rule 3745-17-07(A)

OAC rule 3745-17-08(B)

OAC rule 3745-17-11(B)

OAC rule 3745-35-07(D)
Synthetic Minor to avoid Title V

OAC rule 3745-35-07(D)
Synthetic Minor to avoid Title V

OAC rule 3745-31-05(A)(3)

OAC rule 3745-31-05(A)(3)

OAC rule 3745-17-07(B)(1)

OAC rule 3745-17-08(B)

Ogleb:
PTI A
Issued: 1/23/2003

Emissions Unit ID: **F004**

Applicable Emissions
 Limitations/Control Measures

0.17 lb/hr of particulate emissions per transfer point (stack emissions)

Visible particulate emissions from each baghouse stack shall not exceed 10% opacity, as a six-minute average.

The requirements of this rule also include compliance with OAC rule 3745-35-07(D).

See A.2.b

The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

0.14 TPY of particulate emissions (stack - total for 3 baghouses) as a rolling, 12-month summation.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b

through A.2.d).

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

The requirements of this rule also include compliance with OAC rule 3745-35-07(D).

The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).

0.73 TPY of particulate emissions as a rolling, 12-month summation.

Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.2.b through A.2.d).

The requirements of this rule also include compliance with OAC rules 3745-17-07(B)(1) and 3745-35-07.

Visible particulate emissions of fugitive dust shall not exceed 20

percent opacity as a three-minute average.

The control measures specified by this rule are equivalent to the control measures established pursuant to OAC rule 3745-31-05(A)(3).

0.68 TPY of particulate emissions as a rolling, 12-month summation.

2. Additional Terms and Conditions

- 2.a** The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:
- 3 enclosed conveyor transfer belts for Taconite material; and
 - 1 drop point of Taconite material into the river shuttle boats.
- 2.b** The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:
- enclosure of all the Taconite conveyor belts, excluding the drop point of the Taconite material into the river shuttle boats;
 - installation of a water spray scrubber at each of the belt to belt transfer points;
 - installation of a baghouse at each of the belt to belt transfer points; and
 - installation of a water spray bar at the boom end drop point of Taconite material into the river shuttle boats.
- Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** 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.
- 2.d** Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

B. Operational Restrictions

1. The permittee shall operate a water spray scrubber box at each belt to belt transfer point of the material handling operation for control of particulate emissions while this emissions unit is in operation.
2. The permittee shall operate a water spray bar at the boom end drop point of Taconite material into the river shuttle boats for the control of particulate emissions while this emissions unit is in operation.
3. The permittee shall operate a baghouse at each belt to belt transfer point of the material handling operation for control of particulate emissions while this emissions unit is in operation.
4. The pressure drop across each of the baghouses shall be maintained within the range of 2 - 8 inches of water while the emissions unit is in operation.
5. The maximum annual throughput rate for this emissions unit shall not exceed 2.7 million tons, based upon a rolling, 12-month summation of the monthly throughput rates.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the throughput rates specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative throughput rate in tons</u>
1	480,000
1-2	960,000
1-3	1,260,000
1-4	1,560,000
1-5	1,860,000
1-6	2,160,000
1-7	2,360,000
1-8	2,560,000
1-9	2,700,000
1-10	2,700,000
1-11	2,700,000
1-12	2,700,000

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual Taconite material handling limitation for this emissions unit shall be based upon a

rolling, 12-month summation of the monthly material throughput rates.

6. The permittee shall handle only taconite ore pellets which have been screened and washed prior to receipt, and have a maximum silt content of 4.0 %, using the ASTM C-136 test method.

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform daily inspections of such operations.
2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
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.
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 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.

5. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across each of the baghouses while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across each of the baghouses on a daily basis whenever this emissions unit is in operation.

6. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the throughput amount of Taconite material, in tons, for each month;
 - b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the throughput amount of Taconite material, in tons; and
 - c. the silt content of the Taconite and iron ore concentrate material based upon results of the ASTM C-136 test method.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative amount of Taconite material processed, in tons, for each calendar month.

D. 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.
2. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month Taconite material processing rate limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative production levels.
4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the silt content restriction for the Taconite and iron ore concentrate material.
5. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.2 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation -

Visible particulate emissions of fugitive dust from the shuttle boat loading operation shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1).

b. Emission Limitation -

Visible particulate emissions of fugitive dust from the conveyor transfer points shall not exceed 10 percent opacity as a three-minute average.

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03 (B)(1).

c. Emission Limitation -

Visible particulate emissions from each baghouse stack shall not exceed 10 percent opacity as a six-minute average.

Applicable Compliance Method(s) -

Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

d. Emission Limitation -

0.17 lb/hr of particulate emissions per each transfer point (stack emissions)

Applicable Compliance Method

If required, compliance shall be determined using Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

e. Emission Limitation -

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0.14 TPY of particulate emissions (stack emissions, total for 3 baghouses)

Applicable Compliance Method

Compliance with the above limitation shall be based on the Taconite throughput recordkeeping requirement in Section C. of this permit. In addition, compliance shall be determined using the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 11.23 (1/95) which contains an emission factor of 0.0036 lb of particulate emissions per ton of material transferred using wet spray scrubber controls. This emission factor is multiplied by the actual annual material throughput, in tons, the capture efficiency (0.95), the control efficiency of the baghouses (1-0.99) and a factor of (3) to reference the number of belt transfer points in the operation. Divide the result by 2000 lbs/ton to convert to tons per year.

f. Emission Limitation -

0.73 TPY of particulate emissions, as a rolling, 12-month summation (fugitive emissions escaping the three baghouse enclosures)

Applicable Compliance Method -

Compliance with the above limitation shall be based on the Taconite throughput recordkeeping requirement in Section C. of this permit. In addition, compliance shall be determined using the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 11.23 (1/95) which contains an emission factor of 0.0036 lb of particulate emissions per ton of material transferred using wet spray scrubber controls. This emission factor is multiplied by the actual annual material throughput, in tons, the capture efficiency (1 - 0.95), and a factor of (3) to reference the number of belt transfer points in the operation. Divide the result by 2000 lbs/ton to convert to tons per year.

g. Emission Limitation -

0.68 TPY of particulate emissions, as a rolling, 12-month summation (fugitive emissions from the drop points into the shuttle boats)

Compliance with the above limitation shall be based on the Taconite throughput recordkeeping requirement in Section C. of this permit. In addition, compliance shall also be based on the last phase of the load out operation consisting of the drop point of material into the shuttle boats 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 an emission factor of 0.002 lb of particulate emissions per ton of material transferred was established. This emission factor is multiplied by the actual annual material throughput, in tons, and the control efficiency of the water sprayers (1 -

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0.75). Divide the result by 2000 lbs/ton to convert to tons per year.

F. Miscellaneous Requirements

1. The following special terms and conditions of this permit are federally enforceable: A - F.