



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 04-01498

Fac ID: 0448020068

DATE: 2/12/2008

CSX Transportation, Presque Isle Docks
Richard Nath
500 Water Street, J-275
Jacksonville, FL 32202-4423

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

TDES



**Permit To Install
Terms and Conditions**

**Issue Date: 2/12/2008
Effective Date: 2/12/2008**

FINAL PERMIT TO INSTALL 04-01498

Application Number: 04-01498
Facility ID: 0448020068
Permit Fee: **\$1850**
Name of Facility: CSX Transportation, Presque Isle Docks
Person to Contact: Richard Nath
Address: 500 Water Street, J-275
Jacksonville, FL 32202-4423

Location of proposed air contaminant source(s) [emissions unit(s)]:
**600 Millard Ave
Oregon, Ohio**

Description of proposed emissions unit(s):
Railcar coal unloading, coal thaw shed, coal handling, coal storage piles, and ship load-out.

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

Chris Korleski
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

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 (i.e., postmarked) 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.)

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

CSX Transportation, Presque Isle Docks
PTI Application: 04-01498
Issued: 2/12/2008

Facility ID: 0448020068

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)

CSX Transportation, Presque Isle Docks
PTI Application: 04-01498
Issued: 2/12/2008

Facility ID: 0448020068

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 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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

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.

CSX Transportation, Presque Isle Docks
 PTI Application: 04-01498
 Issued: 2/12/2008

Facility ID: 0448020068

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>
CO	10.82
NOx	12.88
PE	12.81
PM10	7.20
SO2	0.08

7

CSX Transportation, Presque Isle Docks
PTI Application: 04-01498
Issued: 2/12/2008

Facility ID: 0448020068

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0.71

Issued: 2/12/2008

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, and/or Equipment - (F003) - Rotary railcar coal unloading, coal conveying and coal shiploading.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	See Section A.2.a.
OAC rule 3745-17-07(A)	Less stringent than the limitation established by OAC rule 3745-31-05(C).
OAC rule 3745-17-07(B)(1)	Less stringent than the limitation established by OAC rule 3745-31-05(C).
OAC rule 3745-17-08(B), (B)(1)	Less stringent than the limitation established by OAC rule 3745-31-05(C).
OAC rule 3745-17-11(B)	Less stringent than the limitation established by OAC rule 3745-31-05(C).

2. Additional Terms and Conditions

- 2.a Permit to Install 04-01498 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. the following PE and PM10 control measures will be implemented:
 - (a) a partial enclosure with two sides and a roof, and a water spray fogging system will be used at all times whenever the railcar dumper is in operation to control particulate and PM10 emissions;
 - (b) all conveyors will be covered, except for the 3 conveyors

Issued: 2/12/2008

associated with the two reclaimers and stacker that will have wind guards; and

- (c) all conveyor transfer stations will be fully enclosed and have water sprays that will be operated at all times when the associated conveyors are in operation;
 - (d) the bin vent fabric filter controlling emissions from the surge bin shall be operated at all times when material is loaded into or out of the surge bin; and
 - (e) a telescoping chute will be used during shiploading to minimize the drop height for control of PE and PM10 emissions.
- ii. particulate emissions (PE) shall not exceed 0.98 pound per hour or 1.47 tons per year as a rolling, 12-month summation of the monthly emissions;
 - iii. particulate emissions 10 microns or less in diameter (PM10) shall not exceed 0.46 pound per hour or 0.70 ton per year as a rolling, 12-month summation of the monthly emissions;
 - iv. visible particulate emissions of fugitive dust shall not exceed 10 percent opacity as a three-minute average; and
 - v. visible particulate emissions from the surge bin vent filter shall not exceed 10% opacity as a 6-minute average.

B. Operational Restrictions

1. The coal throughput rate shall be restricted to 18,000,000 tons per year, as a rolling, 12-month summation of the monthly throughput for the rotary railcar dumper.

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

<u>Month</u>	<u>Maximum Allowable Cumulative Coal Throughput, tons</u>
1	1,500,000
1-2	3,000,000

CSX Transportation, Presque Isle Docks
DTL Application: 01-01100

Facility ID: 0448020068

Emissions Unit ID: F003

1-3	4,500,000
1-4	6,000,000
1-5	7,500,000
1-6	9,000,000
1-7	10,500,000
1-8	12,000,000

Issued: 2/12/2008

1-9	13,500,000
1-10	15,000,000
1-11	16,500,000
1-12	18,000,000

After the first 12 calendar months of operation, compliance with the annual coal throughput limitation shall be based upon a rolling, 12-month summation of the coal throughput in tons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the surge bin vent filter and for any visible emissions of fugitive dust from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
2. The permittee may, upon receipt of written approval from the Toledo Division of Environmental Services, 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.
3. The permittee shall maintain monthly records of the following information:
 - a. the coal throughput through the rotary railcar dumper for each month, in tons; and
 - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the coal throughput for the rotary railcar dumper, in tons.

Also, during the first 12 calendar months of operation or the first 12 calendar months

Issued: 2/12/2008

following the issuance of this permit, the permittee shall record the cumulative throughput rate for each calendar month, in tons.

D. Reporting Requirements

1. The permittee shall submit written quarterly deviation reports to the Toledo Division of Environmental Services which identify the following:
 - a. identify all days during which any visible particulate emissions were observed from the bin vent filter stack serving this emissions unit;
 - b. identify all days during which any visible fugitive particulate emissions were observed from the equipment comprising this emissions unit; and
 - c. describe any corrective actions taken to eliminate the visible particulate emissions.

If no deviations occurred during a quarterly period, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarterly period.

2. The permittee shall submit to the Toledo Division of Environmental Services quarterly deviation (excursion) reports that identify all exceedances of the rolling, monthly coal throughput limitation in section B. and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative coal throughput. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarter.
3. These quarterly reports shall be submitted to the Toledo Division of Environmental Services by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

E. Testing Requirements

1. Compliance with the emission limitations for the rotary railcar dumper in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.98 pound per hour PE

Emissions Unit ID: **F003****Applicable Compliance Method:**

Compliance may be determined by the following one-time calculation. Calculate the summation of the hourly emissions from the rotary dumper, belt feeders, conveyor transfer stations, surge bin, and shiploader. The maximum process weight rate is 6,000 tons per hour, and the calculated particulate emission factor from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (5.16E-05 pound/ton) times (1- % control efficiency). The estimated control efficiency provided by the applicant for the railcar dumper and transfer stations controlled by enclosures and water spray is 85%. The estimated control efficiency for the below grade belt feeder and transfer to the dumper collecting conveyor is 95% based on a similar permitted process. The estimated control efficiency provided by the applicant for the bin vent filter is 98% for the fully enclosed below-grade belt feeders and transfer to the collecting conveyor.

Railcar dumper:

$$6,000 \text{ tons/hr} \times (5.16\text{E-}05 \text{ lb/ton}) \times (1-0.85) = 0.046 \text{ lb/hr}$$

Belt feeder & collecting conveyor:

$$6,000 \text{ tons/hr} \times 2 \times (5.16\text{E-}05 \text{ lb/ton}) \times (1-0.95) = 0.031 \text{ lb/hr}$$

Conveyor transfer stations:

$$6,000 \text{ tons/hr} \times 6 \times (5.16\text{E-}05 \text{ lb/ton}) \times (1-0.85) = 0.279 \text{ lb/hr}$$

Surge bin:

$$6,000 \text{ tons/hr} \times (5.16\text{E-}05 \text{ lb/ton}) \times (1-0.98) = 0.006 \text{ lb/hr}$$

Surge bin feeder conveyor:

$$6,000 \text{ tons/hr} \times 5.16\text{E-}05 \text{ lb/ton} = 0.310 \text{ lb/hr}$$

Shiploader:

$$6,000 \text{ tons/hr} \times 5.16\text{E-}05 \text{ lb/ton} = 0.310 \text{ lb/hr}$$

- b. **Emission Limitation:**
1.47 tons per year PE

Applicable Compliance Method:

Compliance may be determined by the following one-time calculation. Calculate the summation of the hourly emissions from the rotary dumper, belt feeders, conveyor transfer stations, surge bin, and shiploader. The maximum annual throughput is 18 million tons per year, and the calculated particulate emission factor from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (5.16E-05 pound/ton) times (1- % control efficiency). The estimated control efficiency provided by the applicant for the railcar dumper and transfer stations controlled by enclosures and water spray is 85%. The estimated control efficiency for the below grade belt feeder and transfer to the dumper collecting conveyor is 95% based on a similar permitted process. The estimated control efficiency provided

Issued: 2/12/2008

by the applicant for the bin vent filter is 98% for the fully enclosed below-grade belt feeders and transfer to the collecting conveyor.

Railcar dumper:

$$18\text{E}06 \text{ tons/yr} \times (5.16\text{E-}05 \text{ lb/ton}) \times (1-0.85)/(2000 \text{ lb/ton}) = 0.070 \text{ ton/yr}$$

Belt feeder & collecting conveyor:

$$18\text{E}06 \text{ tons/yr} \times 2 \times (5.16\text{E-}05 \text{ lb/ton} \times (1-0.95))/(2000 \text{ lbs/ton}) = 0.046 \text{ ton/yr}$$

Conveyor transfer stations:

$$18\text{E}06 \text{ tons/yr} \times 6 \times (5.16\text{E-}05 \text{ lb/ton}) \times (1-0.85)/(2000 \text{ lbs/ton}) = 0.418 \text{ ton/yr}$$

Surge bin:

$$18\text{E}06 \text{ tons/yr} \times (5.16\text{E-}05 \text{ lb/ton}) \times (1-0.98)/(2000 \text{ lbs/ton}) = 0.009 \text{ ton/yr}$$

Surge bin feeder conveyor:

$$18\text{E}06 \text{ tons/yr} \times 5.16\text{E-}05 \text{ lb/ton} / (2000 \text{ lbs/ton}) = 0.464 \text{ ton/yr}$$

Shiploader:

$$18\text{E}06 \text{ tons/yr} \times (5.16\text{E-}05 \text{ lb/ton}) / (2000 \text{ lbs/ton}) = 0.464 \text{ ton/yr}$$

- c. Emission Limitation:
0.46 pound per hour PM10

Issued: 2/12/2008**Applicable Compliance Method:**

Compliance may be determined by the following one-time calculation. Calculate the summation of the hourly emissions from the rotary dumper, belt feeders, conveyor transfer stations, surge bin, and shiploader. The maximum process weight rate is 6,000 tons per hour, and the calculated particulate emission factor from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (2.44E-05 pound/ton) times (1- % control efficiency). The estimated control efficiency provided by the applicant for the railcar dumper and transfer stations controlled by enclosures and water spray is 85%. The estimated control efficiency for the below grade belt feeder and transfer to the dumper collecting conveyor is 95% based on a similar permitted process. The estimated control efficiency provided by the applicant for the bin vent filter is 98% for the fully enclosed below-grade belt feeders and transfer to the collecting conveyor.

Railcar dumper:

$$6,000 \text{ tons/hr} \times (2.44\text{E-}05 \text{ lb/ton}) \times (1-0.85) = 0.022 \text{ lb/hr}$$

Belt feeder & collecting conveyor:

$$6,000 \text{ tons/hr} \times 2 \times (2.44\text{E-}05 \text{ lb/ton}) \times (1-0.95) = 0.015 \text{ lb/hr}$$

Conveyor transfer stations:

$$6,000 \text{ tons/hr} \times 6 \times (2.44\text{E-}05 \text{ lb/ton}) \times (1-0.85) = 0.132 \text{ lb/hr}$$

Surge bin:

$$6,000 \text{ tons/hr} \times (2.44\text{E-}05 \text{ lb/ton}) \times (1-0.98) = 0.003 \text{ lb/hr}$$

Surge bin feeder conveyor:

$$6,000 \text{ tons/hr} \times 2.44\text{E-}05 \text{ lb/ton} = 0.146 \text{ lb/hr}$$

Shiploader:

$$6,000 \text{ tons/hr} \times 2.44\text{E-}05 \text{ lb/ton} = 0.146 \text{ lb/hr}$$

- d. **Emission Limitation:**
0.70 ton per year PM10

Applicable Compliance Method:

Compliance may be determined by the following one-time calculation. Calculate the summation of the hourly emissions from the rotary dumper, belt feeders, conveyor transfer stations, surge bin, and shiploader. The maximum annual throughput is 18 million tons per year, and the calculated PM10 emission factor from AP-42 5th Edition, Section 13.2.4, Equation (1) dated 1/95 (2.44E-05 pound/ton) times (1- % control efficiency). The estimated control efficiency provided by the applicant for the railcar dumper and transfer stations controlled by enclosures and water spray is 85%. The estimated control efficiency for the below grade belt feeder and transfer to the dumper collecting conveyor is 95%

Emissions Unit ID: **F003**

based on a similar permitted process. The estimated control efficiency provided by the applicant for the bin vent filter is 98% for the fully enclosed below-grade belt feeders and transfer to the collecting conveyor.

Railcar dumper:

$$18\text{E}06 \text{ tons/yr} \times (2.44\text{E-}05 \text{ lb/ton}) \times (1-0.85)/(2000 \text{ lb/ton}) = 0.033 \text{ ton/yr}$$

Belt feeder & collecting conveyor:

$$18\text{E}06 \text{ tons/yr} \times 2 \times (2.44\text{E-}05 \text{ lb/ton}) \times (1-0.95)/(2000 \text{ lbs/ton}) = 0.022 \text{ ton/yr}$$

Conveyor transfer stations:

$$18\text{E}06 \text{ tons/yr} \times 6 \times (2.44\text{E-}05 \text{ lb/ton}) \times (1-0.85)/(2000 \text{ lbs/ton}) = 0.198 \text{ ton/yr}$$

Surge bin:

$$18\text{E}06 \text{ tons/yr} \times (2.44\text{E-}05 \text{ lb/ton}) \times (1-0.98)/(2000 \text{ lbs/ton}) = 0.004 \text{ ton/yr}$$

Surge bin feeder conveyor:

$$18\text{E}06 \text{ tons/yr} \times 2.44\text{E-}05 \text{ lb/ton} / (2000 \text{ lbs/ton}) = 0.220 \text{ ton/yr}$$

Shiploader:

$$18\text{E}06 \text{ tons/yr} \times (2.44\text{E-}05 \text{ lb/ton}) / (2000 \text{ lbs/ton}) = 0.220 \text{ ton/yr}$$

F. Miscellaneous Requirements

None

Issued: 2/12/2008

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, and/or Equipment -(F004) - Coal storage piles including load-in by a stacker, load-out by 2 bucket wheel reclaimers, grading, and wind erosion controlled by water spray with a maximum throughput of 18 million tons per year and a maximum storage pile surface area of 35.3 acres.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Particulate emissions (PE) shall not exceed 11.09 ton per year as a rolling, 12-month summation of the monthly emissions.</p> <p>There shall be no visible particulate emissions, except for one minute during any sixty-minute period.</p> <p>best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See Sections A.2.b through A.2.f)</p>
OAC rule 3745-31-05(C)	<p>Particulate matter emissions 10 microns or less in diameter (PM10) shall not exceed 5.52 tons per year as a rolling, 12-month summation of the monthly emissions.</p> <p>See Section A.2.a.</p>
OAC rule 3745-17-07(B)(6)	Less stringent than the limitation established by OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-08(B), (B)(6)	Less stringent than the limitation established by OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a Permit to Install 04-01498 for this air contaminant source takes into account the federally enforceable Best Available Technology (BAT) particulate emission

Issued: 2/12/2008

control requirements for the purpose of avoiding BAT requirements under OAC rule 3745-31-05(A)(3) for PM10 emissions.

- 2.b** 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 permit application, the permittee has committed to using partial enclosure on the reclaimers and a telescoping chute to minimize drop height for the stacker to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The above-mentioned control measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during any such operation until further observation confirms that use of the measures is unnecessary.
- 2.d** 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 using water spray to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.e** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

Emissions Unit ID: F004

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in and load-out operation along with wind erosion from pile surfaces at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
Load-in: all coal storage piles	once during each day of operation
Load-out: all coal storage piles	once during each day of operation
Wind erosion: all coal storage piles	once during each day of operation

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 events have ended, except if the next required inspection is within one week.
3. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
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.
5. 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;

Issued: 2/12/2008

- 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 5.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

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.

If no deviations occurred during a quarterly period, the permittee shall submit a quarterly report, which states that no deviations occurred during the quarterly period.

2. These quarterly reports shall be submitted to the Toledo Division of Environmental Services by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

E. Testing Requirements

1. Compliance with the emission limitations for the in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
PE shall not exceed 11.09 tons per year as a rolling, 12-month summation of the monthly emissions.

Emissions Unit ID: F004

Applicable Compliance Method:

Compliance shall be demonstrated based on the following one-time calculation of the summation of emissions from load-in, load-out, wind erosion, and grading. The maximum throughput of coal of 18 million tons per year of coal, as a rolling, 12-month summation of the monthly throughput is made federally enforceable by Emissions Unit F003.

- i. Load-in (stacker): emissions associated with load-in operations are calculated by multiplying the maximum load-in rate of 18,000,000 tons per year of coal by the appropriate emission factor from AP-42 section 13.2.4.3 (1/95) [9.63E-04 lb PE/ton product], applying a 75% control efficiency for use of a telescoping chute with minimum drop height and dividing by 2000 lbs/ton. (2.17 tons fugitive PE/yr)
- ii. Load-out (east side and west side reclaimers): emissions associated with load-out operations are calculated by multiplying the maximum load-out rate of 18,000,000 tons per year of coal by the appropriate emission factor from AP-42 section 13.2.4.3 (1/95) [9.63E-04 lb PE/ton product], applying a 80% control efficiency for partial enclosure and dividing by 2000 lbs/ton. (1.73 tons fugitive PE/yr)
- iii. Wind erosion (storage piles): emissions are calculated by determining the maximum uncontrolled tons of PE using the equations in AP-42 section 13.2.5 (1/95) "Industrial Wind Erosion" [52.06 tons of PE per year], applying a 90% control efficiency for adequate moisture and dividing by 2000 lbs/ton. (5.21 tons fugitive PE/yr).
- iv. Grading: emissions are calculated by using the equation in AP-42 section 11.9, table 1 (10/98) "Western Surface Coal Mining", assuming 2 mph vehicle speed, 8760 hours of operation and dividing by 2000 lbs/ton (1.98 tons fugitive PE/yr).

The sum of the above calculated emissions is $(2.17 + 1.73 + 5.21 + 1.98)$ is equal to 11.09 tons per year.

- b. Emission Limitation:
PM10 emissions shall not exceed 5.52 tons per year as a rolling, 12-month summation of the monthly emissions.

Issued: 2/12/2008**Applicable Compliance Method:**

Compliance shall be demonstrated based on the following one-time calculation of the summation of emissions from load-in, load-out, wind erosion, and grading. The maximum throughput of coal of 18 million tons per year of coal, as a rolling, 12-month summation of the monthly throughput is made federally enforceable by Emissions Unit F003.

- i. Load-in (stacker): emissions associated with load-in operations are calculated by multiplying the maximum load-in rate of 18,000,000 tons per year of coal by the appropriate emission factor from AP-42 section 13.2.4.3 (1/95) [$4.56E^{-4}$ lb PM₁₀/ton product], applying a 75% control efficiency for use of a telescoping chute with minimum drop height and dividing by 2000 lbs/ton. (1.03 tons fugitive PM₁₀/yr)
- ii. Load-out (east side and west side reclaimers): emissions associated with load-out operations are calculated by multiplying the maximum load-out rate of 18,000,000 tons per year of coal by the appropriate emission factor from AP-42 section 13.2.4.3 (1/95) [$4.56E^{-4}$ lb PM₁₀/ton product], applying a 80% control efficiency for partial enclosure and dividing by 2000 lbs/ton. (0.82 ton fugitive PM₁₀/yr)
- iii. Wind erosion (storage piles): emissions are calculated by determining the maximum uncontrolled tons of PE using the equations in AP-42 section 13.2.5 (1/95) "Industrial Wind Erosion" [26.03 tons of PM₁₀ per year], applying a 90% control efficiency for adequate moisture and dividing by 2000 lbs/ton. (2.60 tons fugitive PM₁₀/yr).
- iv. Grading: emissions are calculated by using the equation in AP-42 section 11.9, table 1 (10/98) "Western Surface Coal Mining", assuming 2mph vehicle speed, 8760 hours of operation and dividing by 2000 lbs/ton (1.07 tons fugitive PM₁₀/yr).

The sum of the above calculated emissions is (1.03 + 0.82 + 2.60 + 1.07) is equal to 5.52 tons per year.

c. Emission Limitation:

There shall be no visible particulate emissions, except for one minute during any sixty-minute period.

Applicable Compliance Method:

Emissions Unit ID: **F004**

Compliance with the visible emission limitations 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, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

F. Miscellaneous Requirements

None

Issued: 2/12/2008

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, and/or Equipment -(B001) - Thaw shed with multiple natural gas-fired radiant tube burners having a combined maximum heat input of 30 mmBtu/hr

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Carbon monoxide (CO) emissions shall not exceed 84 pounds per million standard cubic feet of natural gas burned and 10.82 tons per year. Nitrogen oxides (NOx) emissions shall not exceed 100 pounds per million standard cubic feet of natural gas burned and 12.88 tons per year.
OAC rule 3745-17-07(A)(1)	Visible emissions shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by the rule.
OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) shall not exceed 0.020 pound per million Btu of actual heat input.
OAC rule 3745-18-06(A)	exemption due to sole combustion of natural gas as fuel
OAC rule 3745-21-07(B)	See Section A.2.b.
OAC rule 3745-21-08(B)	See Section A.2.c.
OAC rule 3745-31-05(A)(3)(b)	See Section A.2.a.

2. Additional Terms and Conditions

- 2.a The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate, PM10, sulfur dioxide, and volatile organic compound emissions from this air contaminant source since the uncontrolled potential to emit for these pollutants is less than ten tons per year.
- 2.b The "latest available control techniques and operating practices in accordance with best current technology" required pursuant to OAC rule 3745-21-07(B) do not apply to this emissions unit, since the potential to emit for volatile organic

Issued: 2/12/2008

compound emissions from this emissions unit is less than 10 tons per year.

- 2.c** The permittee shall satisfy the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

B. Operational Restrictions

1. The permittee shall only burn natural gas as fuel in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

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

D. Reporting Requirements

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

E. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

Emissions Unit ID: B001

20% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A using the methods and procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

CO emissions shall not exceed 84 pound per million standard cubic feet of natural gas burned

Applicable Compliance Methods:

Compliance with this emission limitation shall be based upon the CO emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98).

c. Emission Limitation:

CO emissions shall not exceed 10.82 tons per year

Applicable Compliance Method:

Compliance may be determined by the following one-time calculation. Multiply the maximum natural gas usage (0.0294 mmscf/hr) by the short term emission limitation (84 lb/mmscf), multiply by the maximum annual operating hours (8,760 hrs/yr), and divide by 2,000 pounds per ton.

d. Emission Limitation:

NOx emissions shall not exceed 100 pound per million standard cubic feet of natural gas burned

Applicable Compliance Methods:

Compliance with this emission limitation shall be based upon the NOx emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98).

e. Emission Limitation:

NOx emissions shall not exceed 12.88 tons per year

Applicable Compliance Method:

Compliance may be determined by the following one-time calculation. Multiply the maximum natural gas usage (0.0294 mmscf/hr) by the short term emission

Issued: 2/12/2008

limitation (100 lb/mmscf), multiply by the maximum annual operating hours (8,760 hrs/yr), and divide by 2,000 pounds per ton.

- f. Emission Limitation:
PE shall not exceed 0.020 pound per million Btu of actual heat input

Applicable Compliance Method:

Compliance may be determined by dividing the particulate emission factor (1.9 lb/mmscf) from AP-42, AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98) and dividing by the heat content of natural gas (1,020 mmBtu/mmscf).

If required, the permittee shall demonstrate compliance using Methods 1 thru 5 of 40 CFR Part 60, Appendix A and OAC rule 3745-17-03(B)(9).

Issued: 2/12/2008

F. Miscellaneous Requirements

None