



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
HARRISON 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: 06-08149

Fac ID: 0634000108

DATE: 12/21/2006

Eastern Ohio Coal LLC
Benjamin Wurts
536 N. Main St.
Cadiz, OH 43907

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

SEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 12/21/2006
Effective Date: 12/21/2006**

FINAL PERMIT TO INSTALL 06-08149

Application Number: 06-08149
Facility ID: 0634000108
Permit Fee: **\$2600**
Name of Facility: Eastern Ohio Coal LLC
Person to Contact: Benjamin Wurts
Address: 536 N. Main St.
Cadiz, OH 43907

Location of proposed air contaminant source(s) [emissions unit(s)]:
**Flemming Rd County 52
Jewett, Ohio**

Description of proposed emissions unit(s):
Mineral extraction operation.

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

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

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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)

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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.

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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>
fugitive PE	58.78

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 - (F001) - Mineral extraction/material handling: Blasting, drilling, overburden removal, bulldozing, and truck loading - 10 acres mined per year - Maximum of 176360 tons of coal and 366920 tons of limestone extracted per year

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Total fugitive particulate emissions (PE) from mineral extraction and material handling activities shall not exceed 54.88 TPY. The permittee shall employ best available control measures that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. See section A.2.a-d. Opacity Restrictions (see A.2.e)
OAC rule 3745-17-07(B)	See section A.2.f
OAC rule 3745-17-08(B)	See section A.2.g

2. Additional Terms and Conditions

- 2.a The following mineral extraction operations are covered by this permit and subject to the above mentioned requirements:

- i. bulldozing of overburden;
- ii. truck loading;
- iii. blasting;
- iv. drilling.

- 2.b The permittee shall employ best available control measures for the above-identified mineral extraction operations 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 measures to ensure compliance:

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Mineral Extraction Operation	Control Measure(s)
bulldozing of overburden	maintain sufficient moisture content, water application as necessary
truck loading	maintain sufficient moisture content, water application as necessary
blasting	minimize area to be blasted and prevention of overshooting
drilling	wet drilling and/or baghouse

Nothing in the above table shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** The above-mentioned control measure(s) shall be employed during blasting of coal and limestone, drilling of coal and limestone, bulldozing of overburden, material handling, and material transport if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.
- 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 rule 3745-31-05.
- 2.e** Visible particulate emissions shall not exceed 20% opacity as a 3-minute average from the following mineral extraction operations: bulldozing of overburden, truck loading, and drilling.
- 2.f** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.g** This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

B. Operational Restrictions

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DTI Application: 06 08410

Facility ID: 0634000108

Emissions Unit ID: F001

None

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C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each mineral extraction operation in accordance with the following frequencies:

<u>mineral extraction identification</u>	<u>minimum inspection frequency</u>
All	Daily

2. No inspection shall be necessary if any 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 purpose of the inspections is to determine the need for implementing the control measures specified in this permit for mineral extraction activities. The inspections shall be performed during representative, normal operating conditions.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, 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 in 4.d. shall be kept separately for each mineral extraction operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

D. Reporting Requirements

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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 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.1. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission limitation:

Total fugitive particulate emissions (PE) from mineral extraction and material handling activities shall not exceed 54.88 TPY.

Compliance with the annual emission limitation shall be demonstrated by the following calculation based on the emission factors in AP-42 section 11.9 (1/95) and RACM 2.1.4 (9/80):

Blasting = $(49.8 \text{ lb/blast} \times 194 \text{ blasts/acre} \times 10 \text{ acres/yr}) / 2000 \text{ lb/ton} = 48.31 \text{ TPY}$

Drilling = $(0.22 \text{ lb/hole} \times 194 \text{ holes/acre} \times 10 \text{ acres/yr}) / 2000 \text{ lb/ton}$
 $= 0.21 \text{ TPY} \times 0.10 \text{ (90\% control efficiency)} = 0.02 \text{ TPY controlled}$

Bulldozing of overburden = $[(5.7(20)^{1.2}) / (10)^{1.3}] \text{ lb/hr} \times 8760 \text{ hr/yr} / 2000 \text{ lb/ton}$
 $= 45.55 \text{ TPY} \times 0.10 \text{ (90\% control efficiency)} = 4.55 \text{ TPY controlled}$

Truck loading = $(1.16 / (10)^{1.2}) \text{ lb/ton} \times 62.5 \text{ tons/hr} \times 8760 \text{ hr/year} / 2000 \text{ lb/ton}$
 $= 20.04 \text{ TPY} \times 0.10 \text{ (90\% control efficiency)} = 2.00 \text{ TPY controlled}$

The sum of the above is 54.88 tons of PE/yr.

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b. Emission Limitation:

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

Applicable Compliance Method:

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

F. Miscellaneous Requirements

None

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 - (F002) - Unpaved roadways and parking - Maximum of 1.6 total miles and 26827 vehicle miles traveled per year

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Total fugitive particulate emissions (PE) from roadways shall not exceed 3.68 TPY.</p> <p>No visible PE except for 3 minutes during any 60-minute period.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See Sections A.2.a through A.2.f.).</p>
OAC rule 3745-17-07(B)	See section A.2.g
OAC rule 3745-17-08(B)	See section A.2.h

2. Additional Terms and Conditions

- 2.a** The unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

unpaved roadways:

1.6 miles of roadways total: all unpaved roadways, parking areas, material handling areas and the storage pile areas which serve mineral extraction site.

- 2.b** The permittee shall employ best available control measures on all unpaved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the unpaved roadways and parking areas by watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.c** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for unpaved roadways that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.d** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.e** Any unpaved roadway, which during the term of this permit is paved or takes on the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using appropriate dust control measures for paved roadways. Any unpaved roadway that takes on the characteristics of a paved surface due to the application of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways. Any unpaved area that is paved shall be subject to a visible emission limitation of no visible emissions except for one minute during any 60 - minute period.

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- 2.f** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.g** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.h** This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following minimum frequencies:

All Roadway and Parking areas - Daily
- 2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
- 3. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

Emissions Unit ID: F002

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

The information required in C.3.d. 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.
2. 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 the terms and conditions of this permit shall be determined in accordance with the following methods:
 - a. Emission Limitation:
Total fugitive particulate emissions (PE) from roadways shall not exceed 3.68 TPY.

Applicable Compliance Method:

Compliance shall be determined based on the emission factor calculation for unpaved roadways and parking areas in AP-42 section 13.2.2, (11/06). Initial compliance has been determined utilizing inputs representing current conditions as follows:

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$$EF = [k(s/12)^a(W/3)^b[(365-p)/365]]$$

where:

EF = size-specific emission factor (lb/VMT);
 s = silt content of road surface material (%) = 8.3;
 W = mean vehicle weight (tons) = 22.25;
 a = constant (dimensionless) = 0.7;
 b = constant (dimensionless) = 0.45;
 k = particle size multiplier (dimensionless) = 4.9; and
 p = number of rain days per year >0.01 in. = 150.

Therefore, EF = 5.49 lb/VMT

Maximum travel = 26827 VMT/year

$(26827 \text{ VMT/year})(5.49 \text{ Lb/VMT})(1 \text{ ton}/2000 \text{ lbs}) = 73.68 \text{ TPY uncontrolled PE}$

Assume 95% control efficiency for roadway watering

$(73.68 \text{ TPY}) (.05) = 3.68 \text{ TPY controlled PE}$

b. Emission Limitation:

No visible PE except for 3 minutes during any 60-minute period.

Applicable Compliance Method:

If required, compliance 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").

F. Miscellaneous Requirements

None

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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) - Storage piles - 3 coal storage piles 100 sq ft each, 1 pile overburden 2000 sq ft.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	<p>Total fugitive particulate emissions (PE) from storage piles shall not exceed 0.22 tons per year.</p> <p>No visible PE except for 1 minute during any 60-minute period.</p> <p>Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See Sections A.2.a. through A.2.f.).</p>
OAC rule 3745-17-07(B)	See section A.2.f
OAC rule 3745-17-08(B)	See section A.2.g

2. Additional Terms and Conditions

- 2.a The storage piles that are covered by this permit and subject to the requirements of OAC rule 3745-31-05 are listed below:

1- 2000 ft² overburden storage pile (annual maximum 1,752,000 tons)
 3 -100 ft² coal storage piles (annual maximum 547,500 tons)

- 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 maintaining reduced drop height and watering to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control

measures to ensure compliance.

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- 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 maintaining low pile height and watering 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 measures 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 measures 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).
- 2.g** This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- 2.h** This facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

B. Operational Restrictions

None

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C. Monitoring and/or Recordkeeping Requirements

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

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storage pile identification minimum load-in inspection frequency

ALL Daily

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

storage pile identification minimum load-out inspection frequency

ALL Daily

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

storage pile identification minimum wind erosion inspection frequency

ALL Daily

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee shall maintain records of the following information:

Emissions Unit ID: **F003**

- 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 C.6.d. shall be kept separately for :

- (i) the load-in operations,
- (ii) the load-out operations,
- (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 quarterly deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and,
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. 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. Emission Limitation:

No visible PE except for 1 minute during any 60-minute period.

Issued: 12/21/2006

Compliance Method:

If required, compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

2. Emission Limitation:

Total fugitive particulate emissions (PE) from storage piles shall not exceed 0.22 tons per year.

Issued: 12/21/2006

Compliance Method:

Compliance shall be based on the emission factors found in AP-42, Compilation of Air Pollutant Emission Factors, Chapter 13.2.4 (1/95), Equation 1, for load-in and load-out operations and USEPA, Control of Open Fugitive Dust Sources (9/88), for wind erosion.

Initial compliance has been determined using inputs representing current conditions as follows:

Load in / Load out

Emission Factor Calculation (from AP-42, Table 13.2.4 (1/95))

$$EF = k * 0.0032 * (U/5)^{1.3} / (M/2)^{1.4}$$

where:

k = 0.74 particle size multiplier for TSP
 U = 7.6 mean wind speed, 1.3 to 15 miles per hour
 M = 10 % moisture content of material, 0.25 to 4.8%

$$EF = 0.000429 \text{ pounds/ton}$$

$$(0.000429 \text{ lbs/ton} * 2299500 \text{ tons/Yr} * 8 \text{ (Load in/load out activities)}) / 2000 \text{ lbs/ton} = 3.95 \text{ TPY}$$

Assume 95% control efficiency = 3.95 TPY * 0.05 = 0.20 TPY controlled emissions per year

Wind Erosion Calculation (from USEPA, Control of Open Fugitive Dust Sources (9/88))

$$EF = 1.7 * (s/1.5) * ((365-p)/235) * (f/15)$$

where:

s = 20 silt content of stored material, wt. %
 p = 150 days/yr with > 0.01 inch precipitation
 f = 30 % of time wind speed exceeds 12 mph
 A = 0.053 total surface area of piles, acres

$$EF = 41.48 \text{ pounds/day/acre}$$

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$(41.48 \text{ lbs/day/acre} * 0.053 \text{ acres} * 365 \text{ days}) / 2000 \text{ lbs/ton}$

0.40 TPY

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Assume 95% control efficiency = $0.40 \text{ TPY} * 0.05 =$
0.02 TPY controlled emissions per year

Total Emissions
 $0.20 \text{ TPY} + 0.02 \text{ TPY} = 0.22 \text{ TPY}$

F. Miscellaneous Requirements

None