



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Scott J. Nally, Director

9/30/2013

Certified Mail

Marcie Moore  
Oxford Mining Co. Strasburg Wash Plant  
40580 Cadiz Piedmont Rd  
Cadiz, OH 43907

|    |                                    |
|----|------------------------------------|
| No | TOXIC REVIEW                       |
| No | SYNTHETIC MINOR TO AVOID MAJOR NSR |
| No | CEMS                               |
| No | MACT/GACT                          |
| No | NSPS                               |
| No | NESHAPS                            |
| No | NETTING                            |
| No | MODELING SUBMITTED                 |
| No | SYNTHETIC MINOR TO AVOID TITLE V   |
| No | FEDERALLY ENFORCABLE PTIO (FEPTIO) |
| No | SYNTHETIC MINOR TO AVOID MAJOR GHG |

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0679000017  
Permit Number: P0115228  
Permit Type: OAC Chapter 3745-31 Modification  
County: Tuscarawas

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

**How to appeal this permit**

The issuance of this PTIO is a final action of the Director 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, made payable to "Ohio Treasurer Josh Mandel," 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  
77 South High Street, 17th Floor  
Columbus, OH 43215

## **How to save money, reduce pollution and reduce energy consumption**

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: [www.ohioairquality.org/clean\\_air](http://www.ohioairquality.org/clean_air)

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael W. Ahern, Manager

Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-SEDO



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Oxford Mining Co. Strasburg Wash Plant**

|                |                                  |
|----------------|----------------------------------|
| Facility ID:   | 0679000017                       |
| Permit Number: | P0115228                         |
| Permit Type:   | OAC Chapter 3745-31 Modification |
| Issued:        | 9/30/2013                        |
| Effective:     | 9/30/2013                        |
| Expiration:    | 9/30/2023                        |





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
Oxford Mining Co. Strasburg Wash Plant

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**Final Permit-to-Install and Operate**  
Oxford Mining Co. Strasburg Wash Plant  
**Permit Number:** P0115228  
**Facility ID:** 0679000017  
**Effective Date:** 9/30/2013

## Authorization

Facility ID: 0679000017  
Application Number(s): A0047410, A0047412  
Permit Number: P0115228  
Permit Description: PTIO for Chapter 31 modification for expansion of roadways and parking areas in 2006 and coal refuse storage piles in 2012  
Permit Type: OAC Chapter 3745-31 Modification  
Permit Fee: \$800.00  
Issue Date: 9/30/2013  
Effective Date: 9/30/2013  
Expiration Date: 9/30/2023  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Oxford Mining Co. Strasburg Wash Plant  
7551 Reed Rd. NW  
Strasburg, OH 44680

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

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

Ohio EPA DAPC, Southeast District Office  
2195 Front Street  
Logan, OH 43138  
(740)385-8501

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Scott J. Nally  
Director



**Final Permit-to-Install and Operate**  
Oxford Mining Co. Strasburg Wash Plant  
**Permit Number:** P0115228  
**Facility ID:** 0679000017  
**Effective Date:** 9/30/2013

## Authorization (continued)

Permit Number: P0115228  
Permit Description: PTIO for Chapter 31 modification for expansion of roadways and parking areas in 2006 and coal refuse storage piles in 2012

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

|                                   |  |
|-----------------------------------|--|
| <b>Emissions Unit ID:</b>         | <b>F004</b>                                      |
| Company Equipment ID:             | Roadways and Parking Areas                       |
| Superseded Permit Number:         | P0040991   |
| General Permit Category and Type: | Not Applicable                                   |
| <b>Emissions Unit ID:</b>         | <b>F005</b>                                      |
| Company Equipment ID:             | Raw and Clean Coal and Coal Refuse Storage Piles |
| Superseded Permit Number:         | P0040992   |
| General Permit Category and Type: | Not Applicable                                   |



**Final Permit-to-Install and Operate**  
Oxford Mining Co. Strasburg Wash Plant  
**Permit Number:** P0115228  
**Facility ID:** 0679000017  
**Effective Date:** 9/30/2013

## **A. Standard Terms and Conditions**



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

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

**2. Who is responsible for complying with this permit?**

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

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

**3. What records must I keep under this permit?**

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

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

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

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

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

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

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

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

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

**7. What reports must I submit under this permit?**

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

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

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

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

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

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



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

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

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting<sup>1</sup> a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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<sup>1</sup> Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).



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

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

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

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

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

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



**Final Permit-to-Install and Operate**  
Oxford Mining Co. Strasburg Wash Plant  
**Permit Number:** P0115228  
**Facility ID:** 0679000017  
**Effective Date:** 9/30/2013

## **B. Facility-Wide Terms and Conditions**



1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.
2. Emissions unit F005 contained in this permit is subject to 40 CFR Part 60, Subpart Y. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency



**Final Permit-to-Install and Operate**  
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## **C. Emissions Unit Terms and Conditions**



**1. F004, Paved and Unpaved Roadways and Parking Areas**

**Operations, Property and/or Equipment Description:**

Paved and unpaved roadways and parking areas with a maximum of 82,941 annual vehicle miles traveled (VMT) on unpaved roadways and a maximum of 24,969 annual VMT on paved roadways; Chapter 31 modification, most recently in 2006, due to an increase in the maximum annual VMTs necessary to access the expanded slurry impoundments and haul raw and clean coal; supersedes PTI 06-2225 issued on December 30, 1992 to Horizon Coal Corp.

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

|    | Applicable Rules/Requirements             | Applicable Emissions Limitations/Control Measures   |
|----|---|---|
| a. | OAC rule 3745-31-05(A)(3)                 | Fugitive particulate emissions (PE) shall not exceed 27.96 tons per year.<br><br>There shall be no visible PE except for three minutes during any 60-minute period from unpaved roadways and parking areas.<br><br>There shall be no visible PE except for oneminute during any 60-minute period from paved roadways and parking areas.<br><br>See b)(2)a. below. |
| b. | OAC rules 3745-17-07(A) and 3745-17-08(B) | See b)(2)b. below.  |



(2) Additional Terms and Conditions

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

Paved and Unpaved roadways:

- Pit to raw coal piles (0.15 mile paved / 1 mile unpaved)
- Twp. road to raw coal piles (0.21 mile paved / 0.06 mile unpaved)
- Twp. road to raw storage piles (0.08 mile paved / 0.08 mile unpaved)
- Twp. road to clean storage piles (0.08 mile paved / 0.08 mile unpaved)
- Twp. road to office (0.08 mile paved / 0.03 mile unpaved)
- Coarse refuse to slurry cell (1 mile unpaved)
- Impoundment to prep plant (1.0 mile unpaved)

Unpaved parking areas:

All

- b. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1). This emissions unit is exempt from the visible emissions limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

Unpaved roadways and parking areas: Minimum inspection frequency:

All roads and parking areas Daily

Paved roadways and parking areas: Minimum inspection frequency:

All roads and parking areas Daily



- (2) The purpose of the inspections is to determine the need for implementing 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;
    - 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.
  - (4) The information required in d)(3)d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- f) Testing Requirements
- (1) Compliance with the emissions limitations and/or control requirements specified in b)(1) of these terms and conditions shall be determined in accordance with the following methods:
    - a. Emissions Limitation:  
  
Fugitive PE shall not exceed 27.96 tons per year.
- Applicable Compliance Method:



Compliance with fugitive PE limitation shall be determined by using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 1/11) for paved roadways and Section 13.2.2, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for unpaved roadways. Should further updates in AP-42 occur, the most current equations for unpaved roads shall be used.

Paved Roadways:

$$EF = ((k * (sL)^{0.91} * (W)^{1.02})) * (1 - P/4 * 365))$$

Where:

EF = particulate emission factor (lb/VMT)

k = particle size multiplier (lb/VMT) = 0.011 (AP-42, 13.2.1 (2/2011))

sL = road surface silt loading (g/m<sup>2</sup>) = 70 (AP-42, Table 13.2.1-3 (1/2011))

W = mean vehicle weight (tons) = 38.8 (as calculated based on information submitted in permittee's application)

P = number of days/year with > 0.01 inch precipitation = 140

Therefore EF = 19.83 lb/VMT

Maximum travel = 24,969 miles/year (as submitted in permittee's application)

$$(24,969 \text{ VMT/year})(19.83 \text{ lb/VMT})(1 \text{ ton}/2,000 \text{ lbs}) = 247.53 \text{ tons/year}$$

Assume 95% control efficiency for roadway vacuum sweeping and 1 in 60 min VE limit (Cleveland SIP study)

$$(247.53 \text{ ton/year})(1 - 0.95) = 12.38 \text{ tons/year}$$

Unpaved roadways:

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

Where:

EF = particulate emission factor (lb/VMT)

k = 4.9 (AP-42, 13.2.2 11/2006)

s = surface material silt content (%) = 8.4 (AP-42, Table 13.2.2-1 (11/2006))

a = 0.7 (AP-42, 13.2.2 11/2006)

W = mean vehicle weight (tons) = 39.6 (as calculated based on information submitted in permittee's application submitted in A0048375)



$b = 0.45$  (AP-42, 13.2.2 11/2006)

$P = \text{number of days/year with } > 0.01 \text{ inch precipitation} = 140$

Therefore  $EF = 7.52 \text{ lb/VMT}$

Maximum travel = 82,941 miles/year (as submitted in permittee's application)

$(82,941 \text{ VMT/year})(7.52 \text{ lb/VMT})(1 \text{ ton}/2,000 \text{ lbs}) = 311.65 \text{ tons/year}$

Assume 95% control efficiency speed limit and 3 in 60 min VE limit (Cleveland SIP study)

$(311.65 \text{ tons/year})(1 - 0.95) = 15.58 \text{ tons/year}$

Total Roadway and Parking Area Emissions:

$(12.38 \text{ tons/year}) + (15.58 \text{ tons/year}) = 27.96 \text{ tons/year}$

b. Emissions Limitations:

There shall be no visible PE except for three minutes during any 60-minute period from unpaved roadways and parking areas.

There shall be no visible PE except for one minute during any 60-minute period from paved roadways and parking areas.

Applicable Compliance Method

If required, visible particulate emissions shall be determined according to USEPA Method 22.

g) Miscellaneous Requirements

(1) None.



**2. F005, Raw and Clean Coal and Coal Refuse Storage Piles**

**Operations, Property and/or Equipment Description:**

Load-in, load-out and wind erosion of raw and clean coal piles and load-in, wind erosion and pile maintenance of coal refuse piles; Chapter 31 modification, most recently in 2012, due to increases in throughput and acreage of the raw and clean coal and coal refuse piles; also includes coal refuse pile maintenance not covered by the original PTI; supersedes PTI 06-2225 issued on December 30, 1992 to Horizon Coal Corp.

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

|    | Applicable Rules/Requirements                    | Applicable Emissions Limitations/Control Measures  |
|----|--|--|
| a. | OAC rule 3745-31-05(A)(3), as effective 11/30/01 | Fugitive particulate emissions (PE) shall not exceed 2.44 TPY.<br><br>No visible PE except for one minute during any 60-minute period.<br><br>Best available control measures sufficient to minimize or eliminate the emissions of fugitive dust.<br><br>The requirements of this rule include compliance with 40 CFR Part 60, Subpart Y.<br><br>See b)(2)a.-e. below. |



|    | Applicable Rules/Requirements  | Applicable Emissions Limitations/Control Measures  |
|----|--|--|
| b. | OAC rule 3745-31-05(C), as effective 12/01/06  | See b)(2)f. below.   |
| c. | 40 CFR Part 60, Subpart Y (60.250-60.258)<br><br>[In accordance with 40 CFR 60.250(d), this emissions unit includes open coal storage piles at an affected facility that commenced construction, reconstruction or modification after May 27, 2009]. | Fugitive dust plan requirement (40 CFR Part 60.254(c))<br><br>See b)(2)g. below.   |
| d. | 40 CFR 60.1-19 (40 CFR 60.1(a))  | The provisions of Subpart A apply to the owner or operator of any stationary source which contains an affected facility that commenced construction or modification after the date of publication in 40 CFR Part 60 that is applicable to that facility. |
| e. | OAC rules 3745-17-07(B) and 3745-17-08(B)  | See b)(2)h. below.   |

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.
- b. The storage piles that are covered by this permit and subject to the following requirements are listed below:
  - Raw coal pile(s)
  - Clean coal pile(s)
  - Refuse piles
- c. The permittee shall employ best available control measures on all load-in and load-out operations and pile maintenance activities 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 maintain sufficient inherent moisture and reduce drop heights to minimize visible emissions of fugitive dust.

- 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 maintain sufficient inherent moisture to minimize visible emissions of fugitive dust.
- e. 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).
- f. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

PTIO P0115228 for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding BAT requirements under OAC rule 3745-31-05(A)(3):

- i. Fugitive PE shall not exceed 2.44 TYP;
  - ii. No visible PE except for one minute during any 60-minute period; and
  - iii. In accordance with the permittee's application, the permittee has committed to maintain sufficient moisture and reduce drop heights to minimize visible emissions of fugitive dust.
- g. The requirement to develop a fugitive coal dust emissions control plan only applies to the refuse piles at this facility.
  - h. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1). This emissions unit is exempt from the visible emissions limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable operational restrictions under 40 CFR Part 60, Subpart Y, including the following section:



|           |   |
|-----------|---|
| 60.254(c) | Fugitive coal dust emissions control plan |
|-----------|---|

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

| <u>Storage pile identification</u> | <u>Minimum load-in inspection frequency</u> |
|------------------------------------|---|
| All                                | Daily                                       |

- (2) The permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

| <u>Storage pile identification</u> | <u>Minimum load-out inspection frequency</u> |
|------------------------------------|--|
| All                                | Daily  |

- (3) The permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

| <u>Storage pile identification</u> | <u>Minimum wind erosion inspection frequency</u> |
|------------------------------------|--|
| 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 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:
- a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;



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

The information required in d)(6)d. shall be kept separately for (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.

- (7) The permittee shall comply with the applicable monitoring and recordkeeping requirements under 40 CFR Part 60, Subpart Y, including the following section:

|          |               |
|----------|---------------|
| 60258(a) | Recordkeeping |
|----------|---------------|

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall comply with the applicable reporting requirements under 40 CFR Part 60, Subpart Y, including the following sections:

|           |                         |
|-----------|-------------------------|
| 60.258(b) | Semiannual Reporting    |
| 60.258(d) | Report sent to U.S. EPA |

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emissions Limitation:  
 Fugitive PE shall not exceed 2.44 TPY.



Applicable Compliance Method:

Compliance with the annual emissions limitation is based on the below calculations:

**Raw Coal Pile**

Load-in/Load-out:

$$EF = k*(0.0032)*(U/5)^{1.3}/(M/2)^{1.4} \quad (\text{AP-42 Equation 13.2.4.3-1, 11/06})$$

Where:

K = 0.74 particle size multiplier for TSP

U = 9.7 mean wind speed

M = 6.0% moisture content of material

Therefore:

$$EF = 0.001204 \text{ lb/ton}$$

$$(1 \text{ load-in point} + 1 \text{ load-out point}) * (0.001204 \text{ lb/ton}) * (1,314,000 \text{ TPY}) (1 \text{ ton}/2,000 \text{ lbs}) = 1.58173 \text{ TPY uncontrolled}$$

Assume 95% control for watering, inherent moisture content and precautionary measures:

$$(1.58173 \text{ TPY}) * (1 - 0.95) = 0.07909 \text{ TPY controlled}$$

Wind erosion:

$$EF = (1.7) * (s/1.5) * ((365-p)/(235)) * (f/15) \quad (\text{US EPA: Control of Open Fugitive Dust Sources, Eq. 4-9, 9/88})$$

Where:

S = 5.5 silt content of stored material, wt. %

P = 140 days/yr with >0.01 inch precipitation

F = 30 % of time wind speed exceeds 12 mph

A = 2 total surface area of piles, acres

Therefore:

$$EF = 11.93617 \text{ lbs/day/acre}$$

$$(11.93617 \text{ lbs/day/acre}) / (365 \text{ days/yr}) * (2 \text{ acres}) (1 \text{ ton}/2,000 \text{ lbs}) = 4.356702$$



TPY uncontrolled

Assume 95% control for watering, inherent moisture content and precautionary measures:

$$(4.356702 \text{ TPY}) * (1 - 0.95) = 0.217835 \text{ TPY controlled}$$

Raw coal pile total PE:

$$0.07909 \text{ TPY} + 0.217835 \text{ TPY} = 0.3 \text{ TPY Controlled}$$

**Clean Coal Pile**

Load-in/Load-out:

$$EF = k * (0.0032) * (U/5)^{1.3} / (M/2)^{1.4} \quad (\text{AP-42 Equation 13.2.4.3-1, 11/06})$$

Where:

K = 0.74 particle size multiplier for TSP

U = 9.7 mean wind speed

M = 7.0% moisture content of material

Therefore:

$$EF = 0.00097 \text{ lb/ton}$$

$$(1 \text{ load-in point} + 1 \text{ load-out point}) * (0.00097 \text{ lb/ton}) * (1,314,000 \text{ TPY}) * (1 \text{ ton} / 2,000 \text{ lbs}) = 1.274747 \text{ TPY uncontrolled}$$

Assume 95% control for watering, inherent moisture content and precautionary measures:

$$(1.274747 \text{ TPY}) * (1 - 0.95) = 0.063737 \text{ TPY controlled}$$

Wind erosion:

$$EF = (1.7) * (s/1.5) * ((365-p)/(235)) * (f/15) \quad (\text{US EPA: Control of Open Fugitive Dust Sources, Eq. 4-9, 9/88})$$

Where:

S = 4.83 silt content of stored material, wt. %

P = 140 days/yr with >0.01 inch precipitation

F = 30 % of time wind speed exceeds 12 mph

A = 2 total surface area of piles, acres



Therefore:

$$EF = 10.48213 \text{ lbs/day/acre}$$

$$(10.48213 \text{ lbs/day/acre}) / (365 \text{ days/yr}) * (2 \text{ acres}) * (1 \text{ ton} / 2,000 \text{ lbs}) = 3.825977$$

TPY Uncontrolled

Assume 95% control for watering, inherent moisture content and precautionary measures:

$$(3.825977 \text{ TPY}) * (1 - 0.95) = 0.191299 \text{ TPY controlled}$$

Clean coal pile total PE:

$$0.063737 \text{ TPY} + 0.191299 \text{ TPY} = 0.3 \text{ TPY controlled}$$

**Refuse Coal Pile**

Load-in:

$$EF = k * (0.0032) * (U/5)^{1.3} / (M/2)^{1.4} \quad (\text{AP-42 Equation 13.2.4.3-1, 11/06})$$

Where:

K = 0.74 particle size multiplier for TSP

U = 9.7 mean wind speed

M = 7.0% moisture content of material

Therefore:

$$EF = 0.00097 \text{ lb/ton}$$

$$(1 \text{ load-in point} + 0 \text{ load-out point}) * (0.00097 \text{ lb/ton}) * (1,314,000 \text{ TPY}) * (1 \text{ ton} / 2,000 \text{ lbs}) = 0.089252 \text{ TPY uncontrolled}$$

Assume 95% control for watering, inherent moisture content and precautionary measures:

$$(0.089252 \text{ TPY}) * (1 - 0.95) = 0.004463 \text{ TPY controlled}$$

Wind erosion:

$$EF = (1.7) * (s/1.5) * ((365-p)/(235)) * (f/15) \quad (\text{US EPA: Control of Open Fugitive Dust Sources, Eq. 4-9, 9/88})$$

Where:

S = 2.3 silt content of stored material, wt. %



P = 140 days/yr with >0.01 inch precipitation

F = 30% of time wind speed exceeds 12 mph

A = 27 total surface area of piles, acres

Therefore:

EF = 4.991489 lbs/day/acre

$(4.991489 \text{ lbs/day/acre}) / (365 \text{ days/yr}) * (27 \text{ acres}) (1 \text{ ton} / 2,000 \text{ lbs}) = 24.59556$

TPY Uncontrolled

Assume 95% control for watering, inherent moisture content and precautionary measures:

$(24.59556 \text{ TPY}) * (1 - 0.95) = 1.229778 \text{ TPY Controlled}$

Bulldozing operations:

(US EPA: AP-42, Table 11.9-1)

$EF = 5.7(s)^{1.2} / (M)^{1.3}$

Where:

s = 2.3% material silt content

M = 7%, material moisture content

$EF = 5.7(2.3)^{1.2} / (7)^{1.3}$

$EF = 1.23 \text{ lbs/hr} * 20 \text{ hours/week} * 52 \text{ weeks/year} = 1,279.2 \text{ lbs/year}$

$(1,279.2 \text{ lbs/year}) (1 \text{ ton} / 2,000 \text{ lbs}) = 0.64 \text{ TPY}$

Refuse coal pile total PE:

$0.004463 \text{ TPY} + 1.229778 \text{ TPY} + 0.64 = 1.84 \text{ TPY Controlled}$

Total PE from all Piles

$0.3 + 0.3 + 1.84 = 2.44 \text{ TPY}$

b. Emissions Limitation:

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



**Final Permit-to-Install and Operate**  
Oxford Mining Co. Strasburg Wash Plant  
**Permit Number:** P0115228  
**Facility ID:** 0679000017  
**Effective Date:** 9/30/2013

Applicable Compliance Method:

If required, visible emissions of fugitive dust shall be determined according to USEPA Method 22.

g) Miscellaneous Requirements

(1) None.