



Environmental
Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

7/14/2010

TERRY MILHOAN
SEAFORTH MINERAL & ORE CO INC
PO BOX 397
EAST LIVERPOOL, OH 43920

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0215020220
Permit Number: P0106029
Permit Type: Renewal
County: Columbiana

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI 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 Kevin Boyce," 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

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-NEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
SEAFORTH MINERAL & ORE CO INC**

Facility ID: 0215020220
Permit Number: P0106029
Permit Type: Renewal
Issued: 7/14/2010
Effective: 7/14/2010
Expiration: 7/14/2015



Division of Air Pollution Control
Permit-to-Install and Operate
for
SEAFORTH MINERAL & ORE CO INC

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Authorization

Facility ID: 0215020220
Application Number(s): A0039114
Permit Number: P0106029
Permit Description: FEPTIO renewal
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 7/14/2010
Effective Date: 7/14/2010
Expiration Date: 7/14/2015
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

SEAFORTH MINERAL & ORE CO INC
FIRST & MARKET ST
East Liverpool, OH 43920

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

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

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Chris Korleski
Director



Authorization (continued)

Permit Number: P0106029
Permit Description: FEPTIO renewal

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

Emissions Unit ID:	F001
Company Equipment ID:	Storage piles
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	F002
Company Equipment ID:	Material handling
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P001
Company Equipment ID:	Rotary Dryer No. 1 and Bagging Operations
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	Rotary Dryer No. 2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P003
Company Equipment ID:	Rotary Dryer No. 3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P004
Company Equipment ID:	Rotary Dyer No. 4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P005
Company Equipment ID:	Bagging Operations
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

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, Northeast 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 submitting¹ 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.

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

¹ 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).

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.

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.

C. Emissions Unit Terms and Conditions



1. F001, Storage piles

Operations, Property and/or Equipment Description:

Storage piles: wind losses, in-loading & out-loading

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Compliance with OAC rule 3745-17-08(B) See b)(2)a and b)(2)b.
c.	OAC rule 3745-17-07(B)(6)	No visible particulate emissions, except for 13 minutes during any sixty-minute observation period.
d.	OAC rule 3745-17-08(B)	Reasonably available control measures (RACM) that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. See b)(2)b.

(2) Additional Terms and Conditions

a. Best available technology (BAT) was determined in PTI #17-798 (issued on July 25, 1990) to be compliance with OAC rule 3745-17-08(B) to minimize or eliminate visible particulate emissions.

b. RACM shall include, but not be limited to, the following:

- i. The permittee shall maintain minimal material (with sufficient moisture) drop heights from the front end loaders to the storage piles to minimize or eliminate fugitive during all load- in activities.
 - ii. The permittee shall place in storage fluorspar that has a sufficient moisture content. The permittee has committed to watering the piles, as necessary, to minimize or eliminate fugitive dust from wind erosion.
 - iii. The storage piles located outside shall be completely covered by heavy duty tarp. Storage piles may also be stored within a 3-sided building with a roof.
 - iv. The permittee shall maintain the bulk material delivery system in a manner that will minimize or eliminate the visible emissions of fugitive dust during the bulk loading of fluorspar to the dryers and/or bagging operations. The permittee shall instruct and require operators of bucket loaders not to overload the bucket and shall clean up spilled materials promptly in order to minimize or eliminate fugitive dust during load-out activities.
 - v. The permittee shall avoid dragging any front-end loader bucket along the ground.
 - vi. 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).
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform daily inspections of the load-in and load-out operations, and of the wind erosion from pile surfaces during representative, normal operations.
 - (2) An inspection of the wind erosion from pile surfaces is not required when the piles are covered with snow and/or ice, and/or if precipitation has occurred that is sufficient for that day to ensure compliance with the visible particulate emissions limitations.
 - (3) The purpose of the inspections is to verify that the control measures required in b)(2)b are employed, and to employ other control measures if necessary in order to minimize or eliminate fugitive dust.
 - (4) The permittee shall maintain daily records of the following information:
 - a. The date and reason why any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

- b. The findings from each daily inspection, i.e., a report as to whether the required control measures were employed or not.
- c. The date of each inspection where it was determined to implement watering, or any other control measure to minimize or eliminate fugitive dust.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions:
 - a. each day during which an inspection of the load in & out operations and wind erosion of the storage piles was not performed; and
 - b. each instance when a control measure was not implemented to minimize or eliminate fugitive dust.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:
 - a. Emission Limitation:

No visible particulate emissions, except for 13 minutes during any sixty-minute observation period.

Applicable Compliance Method:

Compliance with the visible emissions limitation for fugitive dust from material storage piles identified in this permit shall be determined in accordance with U.S. EPA Method 22, with the following modifications as listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03:

 - i. if the observer's view is obscured and observations must be terminated prior to completing the necessary or desired observation period, the observer shall note this fact on the observation form; and the observation period shall be completed when the view of the storage pile is no longer obscured;
 - ii. the observer shall identify all interruptions due to rest breaks on the observation form; and

- iii. observations, excluding break periods and periods of obscure vision, shall be considered continuous for the purpose of determining compliance with the visible emissions limitation.
- g) **Miscellaneous Requirements**
- (1) The terms and conditions of this permit supersede the terms and conditions of PTI#17-502 and #17-798.



2. F002, Material handling

Operations, Property and/or Equipment Description:

Material handling: Crain/clam shell off-loading barges & rail, hopper filling, bucket elevators, transfer points, conveyors and front end loader transfers

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	See b)(2)a, b)(2)b and b)(2)c.
c.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed twenty percent opacity as a three-minute average.
d.	OAC rule 3745-17-08(B)	Reasonably available control measures (RACM) that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. See b(2)c.

(2) Additional Terms and Conditions

a. Best available technology (BAT) was determined in PTI #17-502 (issued on August 12, 1987) to be "enclosures," which are also required by OAC rule 3745-17-08(B) to minimize or eliminate visible particulate emissions.

- b. The material handling operations that are covered by this permit include barge and rail car unloading, day hopper filling, belt-to-belt transfer, bucket elevator transfers, and front end loader transfers.
- c. RACM shall include, but not be limited to, the following:
 - i. Loading Hopper

The permittee shall (a) not overload front end loader bucket and receiving hopper, (b) load only material having adequate moisture content, and (c) promptly clean up spilled material in order to minimize or eliminate visible emissions of fugitive dust.
 - ii. Conveying

The permittee shall maintain all enclosures, joints and seals on all conveyors and bucket elevators in order to minimize or eliminate visible emissions of fugitive dust.
 - iii. Transfer Points

The permittee shall maintain the enclosures, joints and seals at all transfer points in order to minimize or eliminate visible emissions of fugitive dust.
 - iv. 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).
- c) Operational Restrictions
 - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall perform daily inspections of the material handling operations during representative, normal operations.
 - (2) The purpose of the inspections is to verify that the control measures required in b)(2)c are employed, and to employ other control measures if necessary in order to minimize or eliminate fugitive dust.
 - (3) The permittee shall maintain daily records of the following information:
 - a. The date and reason why any required inspection was not performed;
 - b. The findings from each daily inspection, i.e., a report as to whether the hopper loading operations were performed adequately and whether the enclosures, joints and seals of the conveyors, bucket elevators, and transfer points were found to be in satisfactory condition. The report shall also include any corrective

action taken. If no corrective action was taken, the report shall include the reason.

e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions:
 - a. each day during which an inspection of the material handling operations was not performed; and
 - b. each instance when a control measure was not implemented to minimize or eliminate fugitive dust.

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:
 - a. Emission Limitation:

Visible particulate emissions shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method:

Compliance with the visible emissions limitation for fugitive dust from material handling operations shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit supersede the terms and conditions of PTI#17-502.



3. P001, Rotary Dryer No. 1 and Bagging Operations

Operations, Property and/or Equipment Description:

6 ft diameter gas fired rotary kiln/dryer No.1 with feed hopper, screener, bins and baghouse with bagging operations.

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. b)(1)a, b)(1)b, b)(2)a, c)(1), d)(1-5), e)(2), f)(1)a, f)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #02-14996)	<u>Particulate emissions (PE) from stack:</u> 0.02 grains per dry standard cubic foot of exhaust gases, 1.4 pounds per hour, and 6.1 tons per year Visible particulate emissions from the stack shall not exceed five-percent opacity, as a six-minute average. <u>Fugitive emissions:</u> Visible fugitive particulate emissions shall not exceed five-percent opacity, as a three-minute average. <u>Natural gas combustion emissions:</u> NOx:0.51 lb/hr and 2.2 tons per year CO: 0.43 lb/hr and 1.9 tons per year
b.	OAC rule 3745-31-05(D)(1)(b)	See b)(2)a.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
d.	OAC rule 3745-17-07(B)	The fugitive visible emission limitation specified by this rule is less stringent than the fugitive visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
e.	OAC rule 3745-17-08(B)	Reasonably available control measures (RACM) that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. See b)(2)a-e.
f.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)

(2) Additional Terms and Conditions

- a. The emissions from the dryer and bagging operations shall be vented to the baghouse at all times when this emissions unit is in operation. The baghouse shall be operated in such a manner to achieve compliance with the particulate emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
- b. The collection efficiency of the baghouse control system shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.
- c. This emissions unit shall be equipped with an induced draft fan that creates negative pressure on the inside of the dryer/kiln, the duct from the dryer/kiln to the baghouse, and the baghouse.
- d. RACM for the bagging operations may include keeping the top of each bag over the opening where dried material exits.
- e. If necessary, the permittee shall employ other control measures not listed in this permit in order to minimize or eliminate visible particulate emissions of fugitive dust.

c) Operational Restrictions

- (1) The permittee shall regularly maintain the baghouse control equipment associated with this emission unit in accordance with the manufacturer's recommendations. Maintenance shall include regular repair and /or replacement of filters/bags so as to maximize the particulate collection efficiency of the control system.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In order to maintain compliance with the applicable emissions limitations contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 2 to 6 inches of water.
- (2) The acceptable range of 2 to 6 inches of water for the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Northeast District Office. The permittee may request revisions to the permitted range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.
- (4) The permittee shall record the pressure drop across the baghouse on a daily basis.
- (5) Whenever the monitored value for the pressure drop deviates from the range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;

- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (6) The permittee shall maintain daily records of the type and amount of material processed through this emissions unit.
- (7) 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 stack and for any visible emissions of fugitive dust from the egress points serving 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 emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (8) 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.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse.
 - b. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - c. each incident of deviation described in "b" (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in "b" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; andeach incident of deviation described in "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Northeast District Office).

- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (4) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. all days during which any visible emissions of fugitive dust were observed from the egress points; and

- c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- f) Testing Requirements
 - (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:
 - a. Emission Limitation:
1.4 pound PE per hour and 0.02 grain per dry standard cubic foot of exhaust gases

Applicable Compliance Method:
If required, compliance with the particulate emission rates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.
 - b. Emission Limitation:
6.1 tons PE per year

Applicable Compliance Method:
This limit is based on the allowable hourly emission limit (1.4 lb/hr) multiplied by the maximum possible operating hours (8,760 hrs/yr), and divided by 2,000 (lbs/ton). Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.
 - c. Emission Limitation:
Visible particulate emissions from the stack shall not exceed five-percent opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.
 - d. Emission Limitation:
Visible fugitive particulate emissions shall not exceed five-percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the fugitive visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

e. Emission Limitation:

0.51 lb NO_x /hr and 2.2 tons NO_x per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by the following calculation, using an emission factor of 100 lbs NO_x/mmft³ from AP-42 (7/98) Table 1.4-1, and the maximum heat capacity of 5.2 mmBtu/hr.

$$E \text{ (lbs NO}_x\text{/hr)} = (100 \text{ lbs NO}_x\text{/mmft}^3\text{)(ft}^3\text{/1,000 Btu)(5.2 mmBtu/hr)}$$

Compliance with the annual limit shall be determined by multiplying the hourly limit by (number of hours of operation/year)(ton/2,000 lbs).

f. Emission Limitation:

0.43 lb CO/hr and 1.9 tons CO per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by the following calculation, using an emission factor of 84 lbs CO/mmft³ from AP-42 (7/98) Table 1.4-1, and the maximum heat capacity of 5.2 mmBtu/hr.

$$E \text{ (lbs CO/hr)} = (84 \text{ lbs CO/mmft}^3\text{)(ft}^3\text{/1,000 Btu)(5.2 mmBtu/hr)}$$

Compliance with the annual limit shall be determined by multiplying the hourly limit by (number of hours of operation/year)(ton/2,000 lbs).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit supersede the terms and conditions of PTI#02-14996.



4. P002, Rotary Dryer No. 2

Operations, Property and/or Equipment Description:

4 ft diameter gas fired rotary kiln/dryer No.2 with feed hopper, screener, bins and baghouse

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. b)(1)a, b)(1)b, b)(2)b, c)(1), d)(1-5), e)(2), f)(1)a, f)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #02-14996)	<p><u>Particulate emissions (PE) from stack:</u> 0.02 grains per dry standard cubic foot of exhaust gases, 0.94 pound per hour, and 4.1 tons per year See b)(2)a.</p> <p>Visible particulate emissions from the stack shall not exceed five-percent opacity, as a six-minute average.</p> <p><u>Fugitive emissions:</u> Visible fugitive particulate emissions shall not exceed five-percent opacity, as a three-minute average.</p> <p><u>Natural gas combustion emissions:</u> NOx:0.34 lb/hr and 1.5 tons per year CO: 0.29 lb/hr and 1.3 tons per year</p>
b.	OAC rule 3745-31-05(D)(1)(b)	See b)(2)b



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
d.	OAC rule 3745-17-07(B)	The fugitive visible emission limitation specified by this rule is less stringent than the fugitive visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
e.	OAC rule 3745-17-08(B)	Reasonably available control measures (RACM) that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. See b)(2)b-e.
f.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)

(2) Additional Terms and Conditions

- a. PTI #02-14996 calculated the PE limitations using an incorrect maximum inlet baghouse flow rate of 8,166 dscf/min. Using the correct maximum inlet flow rate of 5,500 dscf/min, the PE limitations are corrected in this permit to be 0.94 lb/hr and 4.1 tpy.
- b. The emissions from the dryer and bagging operations shall be vented to the baghouse at all times when this emissions unit is in operation. The baghouse shall be operated in such a manner to achieve compliance with the particulate emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
- c. The collection efficiency of the baghouse control system shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.
- d. This emissions unit shall be equipped with an induced draft fan that creates negative pressure on the inside of the dryer/kiln, the duct from the dryer/kiln to the baghouse, and the baghouse.
- e. If necessary, the permittee shall employ other control measures not listed in this permit in order to minimize or eliminate visible particulate emissions of fugitive dust.

c) Operational Restrictions

- (1) The permittee shall regularly maintain the baghouse control equipment associated with this emission unit in accordance with the manufacturer's recommendations.

Maintenance shall include regular repair and /or replacement of filters/bags so as to maximize the particulate collection efficiency of the control system.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In order to maintain compliance with the applicable emissions limitations contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 2 to 6 inches of water.
- (2) The acceptable range of 2 to 6 inches of water for the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Northeast District Office. The permittee may request revisions to the permitted range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.
- (4) The permittee shall record the pressure drop across the baghouse on a daily basis.
- (5) Whenever the monitored value for the pressure drop deviates from the range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (6) The permittee shall maintain daily records of the type and amount of material processed through this emissions unit.
- (7) 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 stack and for any visible emissions of fugitive dust from the egress points serving 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 emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (8) 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.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse.
 - each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - each incident of deviation described in "b" (above) where a prompt investigation was not conducted;
 - each incident of deviation described in "b" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

each incident of deviation described in "b" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Northeast District Office).

- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (4) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions:

- a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
- b. all days during which any visible emissions of fugitive dust were observed from the egress points; and
- c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

0.94 pound PE per hour and 0.02 grain per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

If required, compliance with the particulate emission rates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.

b. Emission Limitation:

4.1 tons PE per year

Applicable Compliance Method:

This limit is based on the allowable hourly emission limit (1.4 lb/hr) multiplied by the maximum possible operating hours (8,760 hrs/yr), and divided by 2,000 (lbs/ton). Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions from the stack shall not exceed five-percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

d. Emission Limitation:

Visible fugitive particulate emissions shall not exceed five-percent opacity, as a three-minute average.

Applicable Compliance Method:

Compliance with the fugitive visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

e. Emission Limitation:

0.34 lb NO_x /hr and 1.5 tons NO_x per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by the following calculation, using an emission factor of 100 lbs NO_x/mmft³ from AP-42 (7/98) Table 1.4-1, and the maximum heat capacity of 3.5 mmBtu/hr.

$$E \text{ (lbs NO}_x\text{/hr)} = (100 \text{ lbs NO}_x\text{/mmft}^3\text{)(ft}^3\text{/1,000 Btu)(3.5 mmBtu/hr)}$$

Compliance with the annual limit shall be determined by multiplying the hourly limit by (number of hours of operation/year)(ton/2,000 lbs).

f. Emission Limitation:

0.29 lb CO/hr and 1.3 tons CO per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by the following calculation, using an emission factor of 84 lbs CO/mmft³ from AP-42 (7/98) Table 1.4-1, and the maximum heat capacity of 3.5 mmBtu/hr.

$$E \text{ (lbs CO/hr)} = (84 \text{ lbs CO/mmft}^3\text{)(ft}^3\text{/1,000 Btu)(3.5 mmBtu/hr)}$$

Compliance with the annual limit shall be determined by multiplying the hourly limit by (number of hours of operation/year)(ton/2,000 lbs).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit supersede the terms and conditions of PTI#02-14996.



5. P003, Rotary Dryer No. 3

Operations, Property and/or Equipment Description:

4 ft diameter gas fired rotary kiln/dryer No.3 with feed hopper, screener, bins and baghouse

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. b)(1)a, b)(1)b, b)(2)b, c)(1), d)(1-5), e)(2), f)(1)a, f)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #02-14996)	<u>Particulate emissions (PE) from stack:</u> 0.02 grains per dry standard cubic foot of exhaust gases, 0.94 pound per hour, and 4.1 tons per year Visible particulate emissions from the stack shall not exceed five-percent opacity, as a six-minute average. <u>Fugitive emissions:</u> Visible fugitive particulate emissions shall not exceed five-percent opacity, as a three-minute average. <u>Natural gas combustion emissions:</u> NOx:0.34 lb/hr and 1.5 tons per year CO: 0.29 lb/hr and 1.3 tons per year
b.	OAC rule 3745-31-05(D)(1)(b)	See b)(2)a
c.	OAC rule 3745-17-07(A)	The visible emission limitation specified



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
d.	OAC rule 3745-17-07(B)	The fugitive visible emission limitation specified by this rule is less stringent than the fugitive visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
e.	OAC rule 3745-17-08(B)	Reasonably available control measures (RACM) that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. See b)(2)a-d.
f.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)

(2) Additional Terms and Conditions

- a. The emissions from the dryer and bagging operations shall be vented to the baghouse at all times when this emissions unit is in operation. The baghouse shall be operated in such a manner to achieve compliance with the particulate emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
- b. The collection efficiency of the baghouse control system shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.
- c. This emissions unit shall be equipped with an induced draft fan that creates negative pressure on the inside of the dryer/kiln, the duct from the dryer/kiln to the baghouse, and the baghouse.
- d. If necessary, the permittee shall employ other control measures not listed in this permit in order to minimize or eliminate visible particulate emissions of fugitive dust.

c) Operational Restrictions

- (1) The permittee shall regularly maintain the baghouse control equipment associated with this emission unit in accordance with the manufacturer's recommendations. Maintenance shall include regular repair and /or replacement of filters/bags so as to maximize the particulate collection efficiency of the control system.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In order to maintain compliance with the applicable emissions limitations contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 2 to 6 inches of water.
- (2) The acceptable range of 2 to 6 inches of water for the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Northeast District Office. The permittee may request revisions to the permitted range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.
- (4) The permittee shall record the pressure drop across the baghouse on a daily basis.
- (5) Whenever the monitored value for the pressure drop deviates from the range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;

- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (6) The permittee shall maintain daily records of the type and amount of material processed through this emissions unit.
- (7) 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 stack and for any visible emissions of fugitive dust from the egress points serving 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 emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (8) 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.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse.
 - b. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - c. each incident of deviation described in e)(2)b where a prompt investigation was not conducted;
 - d. each incident of deviation described in e)(2)b where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; andeach incident of deviation described in e)(2)b where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Northeast District Office).

- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (4) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. all days during which any visible emissions of fugitive dust were observed from the egress points; and

- c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- f) Testing Requirements
 - (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:
 - a. Emission Limitation:
0.94 pound PE per hour and 0.02 grain per dry standard cubic foot of exhaust gases

Applicable Compliance Method:
If required, compliance with the particulate emission rates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.
 - b. Emission Limitation:
4.1 tons PE per year

Applicable Compliance Method:
This limit is based on the allowable hourly emission limit (1.4 lb/hr) multiplied by the maximum possible operating hours (8,760 hrs/yr), and divided by 2,000 (lbs/ton). Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.
 - c. Emission Limitation:
Visible particulate emissions from the stack shall not exceed five-percent opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.
 - d. Emission Limitation:
Visible fugitive particulate emissions shall not exceed five-percent opacity, as a three-minute average.

Applicable Compliance Method:
Compliance with the fugitive visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

e. Emission Limitation:

0.34 lb NOx /hr and 1.5 tons NOx per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by the following calculation, using an emission factor of 100 lbs NOx/mmft³ from AP-42 (7/98) Table 1.4-1, and the maximum heat capacity of 3.5 mmBtu/hr.

$$E \text{ (lbs NOx/hr)} = (100 \text{ lbs NOx/mmft}^3)(\text{ft}^3/1,000 \text{ Btu})(3.5 \text{ mmBtu/hr})$$

Compliance with the annual limit shall be determined by multiplying the hourly limit by (number of hours of operation/year)(ton/2,000 lbs).

f. Emission Limitation:

0.29 lb CO/hr and 1.3 tons CO per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by the following calculation, using an emission factor of 84 lbs CO/mmft³ from AP-42 (7/98) Table 1.4-1, and the maximum heat capacity of 3.5 mmBtu/hr.

$$E \text{ (lbs CO/hr)} = (84 \text{ lbs CO/mmft}^3)(\text{ft}^3/1,000 \text{ Btu})(3.5 \text{ mmBtu/hr})$$

Compliance with the annual limit shall be determined by multiplying the hourly limit by (number of hours of operation/year)(ton/2,000 lbs).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit supersede the terms and conditions of PTI#02-14996.



6. P004, Rotary Dryer No. 4

Operations, Property and/or Equipment Description:

6 ft diameter gas fired rotary kiln/dryer No.4 with feed hopper, screener, bins and baghouse

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. b)(1)a, b)(1)b, b)(2)a, c)(1), d)(1-5), e)(2), f)(1)a, f)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #02-14996)	<u>Particulate emissions (PE) from stack:</u> 0.02 grains per dry standard cubic foot of exhaust gases, 1.4 pounds per hour, and 6.1 tons per year Visible particulate emissions from the stack shall not exceed five-percent opacity, as a six-minute average. <u>Fugitive emissions:</u> Visible fugitive particulate emissions shall not exceed five-percent opacity, as a three-minute average. <u>Natural gas combustion emissions:</u> NOx:0.51 lb/hr and 2.2 tons per year CO: 0.43 lb/hr and 1.9 tons per year
b.	OAC rule 3745-31-05(D)(1)(b)	See b)(2)a.
c.	OAC rule 3745-17-07(A)	The visible emission limitation specified



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
d.	OAC rule 3745-17-07(B)	The fugitive visible emission limitation specified by this rule is less stringent than the fugitive visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
e.	OAC rule 3745-17-08(B)	Reasonably available control measures (RACM) that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. See b)(2)a-d
f.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)

(2) Additional Terms and Conditions

- a. The emissions from the dryer and bagging operations shall be vented to the baghouse at all times when this emissions unit is in operation. The baghouse shall be operated in such a manner to achieve compliance with the particulate emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
- b. The collection efficiency of the baghouse control system shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.
- c. This emissions unit shall be equipped with an induced draft fan that creates negative pressure on the inside of the dryer/kiln, the duct from the dryer/kiln to the baghouse, and the baghouse.
- d. If necessary, the permittee shall employ other control measures not listed in this permit in order to minimize or eliminate visible particulate emissions of fugitive dust.

c) Operational Restrictions

- (1) The permittee shall regularly maintain the baghouse control equipment associated with this emission unit in accordance with the manufacturer's recommendations. Maintenance shall include regular repair and /or replacement of filters/bags so as to maximize the particulate collection efficiency of the control system.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) In order to maintain compliance with the applicable emissions limitations contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 2 to 6 inches of water.
- (2) The acceptable range of 2 to 6 inches of water for the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Northeast District Office. The permittee may request revisions to the permitted range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.
- (4) The permittee shall record the pressure drop across the baghouse on a daily basis.
- (5) Whenever the monitored value for the pressure drop deviates from the range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;

- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (6) The permittee shall maintain daily records of the type and amount of material processed through this emissions unit.
- (7) 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 stack and for any visible emissions of fugitive dust from the egress points serving 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 emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (8) 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.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse.
 - b. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - c. each incident of deviation described in e)(2)b where a prompt investigation was not conducted;
 - d. each incident of deviation described in e)(2)b where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; andeach incident of deviation described in e)(2)b where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Northeast District Office).

- (3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (4) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. all days during which any visible emissions of fugitive dust were observed from the egress points; and

- c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- f) Testing Requirements
- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:
 - a. Emission Limitation:
1.4 pound PE per hour and 0.02 grain per dry standard cubic foot of exhaust gases

Applicable Compliance Method:
If required, compliance with the particulate emission rates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.
 - b. Emission Limitation:
6.1 tons PE per year

Applicable Compliance Method:
This limit is based on the allowable hourly emission limit (1.4 lb/hr) multiplied by the maximum possible operating hours (8,760 hrs/yr), and divided by 2,000 (lbs/ton). Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.
 - c. Emission Limitation:
Visible particulate emissions from the stack shall not exceed five-percent opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.
 - d. Emission Limitation:
Visible fugitive particulate emissions shall not exceed five-percent opacity, as a three-minute average.

Applicable Compliance Method:
Compliance with the fugitive visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

e. Emission Limitation:

0.51 lb NOx /hr and 2.2 tons NOx per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by the following calculation, using an emission factor of 100 lbs NOx/mmft³ from AP-42 (7/98) Table 1.4-1, and the maximum heat capacity of 5.2 mmBtu/hr.

$$E \text{ (lbs NOx/hr)} = (100 \text{ lbs NOx/mmft}^3)(\text{ft}^3/1,000 \text{ Btu})(5.2 \text{ mmBtu/hr})$$

Compliance with the annual limit shall be determined by multiplying the hourly limit by (number of hours of operation/year)(ton/2,000 lbs).

f. Emission Limitation:

0.43 lb CO/hr and 1.9 tons CO per year from the combustion of natural gas

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by the following calculation, using an emission factor of 84 lbs CO/mmft³ from AP-42 (7/98) Table 1.4-1, and the maximum heat capacity of 5.2 mmBtu/hr.

$$E \text{ (lbs CO/hr)} = (84 \text{ lbs CO/mmft}^3)(\text{ft}^3/1,000 \text{ Btu})(5.2 \text{ mmBtu/hr})$$

Compliance with the annual limit shall be determined by multiplying the hourly limit by (number of hours of operation/year)(ton/2,000 lbs).

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit supersede the terms and conditions of PTI#02-14996.



7. P005, Bagging Operations

Operations, Property and/or Equipment Description:

Bagging Operations: 2 auger packers and 1 air flow bagger.

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a. None.
 - (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - a. None
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #02-14996)	<u>Particulate emissions (PE) from stack:</u> 0.02 grains per dry standard cubic foot of exhaust gases, 0.32 pound per hour, and 1.4 tons per year Visible particulate emissions from the stack shall not exceed five-percent opacity, as a six-minute average. <u>Fugitive emissions:</u> Visible fugitive particulate emissions shall not exceed five-percent opacity, as a three-minute average.
b.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
d.	OAC rule 3745-17-07(B)	The fugitive visible emission limitation specified by this rule is less stringent than



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		the fugitive visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3)
e.	OAC rule 3745-17-08(B)	Reasonably available control measures (RACM) that are sufficient to minimize or eliminate visible particulate emissions of fugitive dust. See b)(2)a-c.
f.	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3)

(2) Additional Terms and Conditions

- a. The emissions from the dryer and bagging operations shall be vented to the baghouse at all times when this emissions unit is in operation. The baghouse shall be operated in such a manner to achieve compliance with the particulate emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).
- b. The collection efficiency of the baghouse control system shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point of capture to the extent possible with good engineering design.
- c. If necessary, the permittee shall employ other control measures not listed in this permit in order to minimize or eliminate visible particulate emissions of fugitive dust.

c) Operational Restrictions

- (1) The permittee shall regularly maintain the baghouse control equipment associated with this emission unit in accordance with the manufacturer's recommendations. Maintenance shall include regular repair and /or replacement of filters/bags so as to maximize the particulate collection efficiency of the control system.

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emissions limitations contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 2 to 6 inches of water.
- (2) The acceptable range of 2 to 6 inches of water for the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Northeast District Office. The permittee may request revisions to the permitted range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring

requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.
- (4) The permittee shall record the pressure drop across the baghouse on a daily basis.
- (5) Whenever the monitored value for the pressure drop deviates from the range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

- (6) The permittee shall maintain daily records of the type and amount of material processed through this emissions unit.
- (7) 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 stack and for any visible emissions of fugitive dust from the egress points serving 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 emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (8) 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.
- e) Reporting Requirements
- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
 - (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;

- b. all days during which any visible emissions of fugitive dust were observed from the egress points; and
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- (3) The permittee shall identify in the annual PER the following information concerning the operations of the baghouse during the 12-month reporting period for this emissions unit:
- a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
 - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in e)(3)a where a prompt investigation was not conducted;
 - d. each incident of deviation described in e)(3)a where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
 - e. each incident of deviation described in e)(3)a where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- f) Testing Requirements
- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:
- a. Emission Limitation:
0.32 pound PE per hour and 0.02 grain per dry standard cubic foot of exhaust gases

Applicable Compliance Method:
If required, compliance with the particulate emission rates shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03.
 - b. Emission Limitation:
1.4 tons PE per year

Applicable Compliance Method:
This limit is based on the allowable hourly emission limit (1.4 lb/hr) multiplied by the maximum possible operating hours (8,760 hrs/yr), and divided by 2,000

(lbs/ton). Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

Visible particulate emissions from the stack shall not exceed five-percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

d. Emission Limitation:

Visible fugitive particulate emissions shall not exceed five-percent opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the fugitive visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

- (1) The terms and conditions of this permit supersede the terms and conditions of PTI#02-14996.