



John R. Kasich, Governor  
 Mary Taylor, Lt. Governor  
 Craig W. Butler, Director

9/25/2015

Kelly Garrett  
 FISHER CAST STEEL  
 6 W. Town St  
 West Jefferson, OH 43162

Certified Mail

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0149000002  
 Permit Number: P0117595  
 Permit Type: OAC Chapter 3745-31 Modification  
 County: Madison

Dear Permit Holder:

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

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

**How to appeal this permit**

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

Environmental Review Appeals Commission  
 77 South High Street, 17th Floor  
 Columbus, OH 43215

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: [www.ohioairquality.org/clean\\_air](http://www.ohioairquality.org/clean_air)

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

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

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

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

If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.  
Assistant Chief, Permitting Section, DAPC

Cc: Ohio EPA-CDO



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
FISHER CAST STEEL**

Facility ID:	0149000002
Permit Number:	P0117595
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	9/25/2015
Effective:	9/25/2015
Expiration:	9/16/2020





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
**FISHER CAST STEEL**

**Table of Contents**

Authorization .....	1
A. Standard Terms and Conditions .....	3
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	4
2. Who is responsible for complying with this permit? .....	4
3. What records must I keep under this permit? .....	4
4. What are my permit fees and when do I pay them?.....	4
5. When does my PTIO expire, and when do I need to submit my renewal application? .....	4
6. What happens to this permit if my project is delayed or I do not install or modify my source? .....	5
7. What reports must I submit under this permit? .....	5
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? .....	5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? .....	6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? .....	6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? .....	6
13. Can I transfer this permit to a new owner or operator?.....	7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? .....	7
15. What happens if a portion of this permit is determined to be invalid? .....	7
B. Facility-Wide Terms and Conditions.....	8
C. Emissions Unit Terms and Conditions .....	10
1. P002, Sand Dryer .....	11
2. P003, Reclaimed Sand Handling.....	20





**Final Permit-to-Install and Operate**  
FISHER CAST STEEL  
**Permit Number:** P0117595  
**Facility ID:** 0149000002  
**Effective Date:** 9/25/2015

## Authorization

Facility ID: 0149000002  
Application Number(s): M0002938, A0053448  
Permit Number: P0117595  
Permit Description: Chapter 31 modification to allow for an increase in sand throughput for the sand reclamation dryer and reclaimed sand handling system and to update the emissions limitations and emissions factors based on site-specific stack test data.  
Permit Type: OAC Chapter 3745-31 Modification  
Permit Fee: \$1,000.00  
Issue Date: 9/25/2015  
Effective Date: 9/25/2015  
Expiration Date: 9/16/2020  
Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

FISHER CAST STEEL  
12 TOWN ST  
West Jefferson, OH 43162

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

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

Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614)728-3778

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

  
Craig W. Butler  
Director



**Final Permit-to-Install and Operate**  
FISHER CAST STEEL  
**Permit Number:** P0117595  
**Facility ID:** 0149000002  
**Effective Date:** 9/25/2015

## Authorization (continued)

Permit Number: P0117595

Permit Description: Chapter 31 modification to allow for an increase in sand throughput for the sand reclamation dryer and reclaimed sand handling system and to update the emissions limitations and emissions factors based on site-specific stack test data.

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

<b>Emissions Unit ID:</b>	<b>P002</b>
Company Equipment ID:	Sand Dryer
Superseded Permit Number:	P0083760
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P003</b>
Company Equipment ID:	Reclaimed Sand Handling
Superseded Permit Number:	P0083760
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
FISHER CAST STEEL  
**Permit Number:** P0117595  
**Facility ID:** 0149000002  
**Effective Date:** 9/25/2015

## **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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 of this permit 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 [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting 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 emission 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 change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

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

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

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

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



**Final Permit-to-Install and Operate**  
FISHER CAST STEEL  
**Permit Number:** P0117595  
**Facility ID:** 0149000002  
**Effective Date:** 9/25/2015

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

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.
2. The permittee is advised that this facility may be subject to the "Generally Available Control Technology" (GACT) requirements under Title 40 of the Code of Regulations, Part 63, Subpart ZZZZZ, the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries Area Sources. At this time the Ohio EPA is not accepting the delegating authority to enforce the standards promulgated under the Urban Air Toxics Strategy. The requirements of this rule, that are applicable to the area source(s) (for hazardous air pollutants) identified in this permit, shall be enforceable by U.S. EPA. Region 5. The complete requirements of this Subpart (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website <http://www.ecfr.gov/> or by contacting the appropriate Ohio EPA District Office or Local Air Agency.



**Final Permit-to-Install and Operate**  
FISHER CAST STEEL  
**Permit Number:** P0117595  
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**Effective Date:** 9/25/2015

## **C. Emissions Unit Terms and Conditions**



**1. P002, Sand Dryer**

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

1.05 MMBtu/hr Sand Reclamation Dryer controlled by a 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)c., c)(1), c)(2), d)(1), e)(3), and f)(1)a. through f)(1)e.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) <i>June 30, 2008</i>	The carbon monoxide, (CO), nitrogen oxides (NO <sub>x</sub> ), volatile organic compound (VOC), particulate matter less than 10 microns in aerodynamic diameter (PM <sub>10</sub> ), and particulate matter less than 2.5 microns in aerodynamic diameter (PM <sub>2.5</sub> ) emissions limitations established by this rule are equivalent to the limitations established pursuant to OAC rule 3745-31-05(D).  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 0.003 tons per rolling, 12-month period.  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) <i>June 30, 2008</i>	See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid Title V)	<p>Outlet grain loading from the baghouse serving this emissions unit shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf).</p> <p>CO emissions shall not exceed 51.2 tons per rolling, 12-month period.</p> <p>NO<sub>x</sub> emissions shall not exceed 8.0 tons per rolling, 12-month period.</p> <p>VOC emissions shall not exceed 7.6 tons per rolling, 12-month period.</p> <p>PM<sub>10</sub> emissions shall not exceed 4.2 tons per rolling, 12-month period.</p> <p>PM<sub>2.5</sub> emissions shall not exceed 1.5 tons per rolling, 12-month period.</p> <p>See c)(1) and c)(2)</p>
d.	OAC rule 3745-17-11(A)(2)	PE shall not exceed 5.38 pounds per hour (lb/hr).
e.	OAC rule 3745-17-07(A)(1)	The visible emissions limitation established by this rule is less stringent than the visible emissions limitation established pursuant to 40 CFR Part 60, Subpart UUU.
f.	40 CFR Part 60, Subpart UUU	<p>The outlet grain loading limitation established by this rule is less stringent than the outlet grain loading limitation established pursuant to OAC rule 3745-31-05(D).</p> <p>Visible particulate emissions shall not exceed 10% opacity as a six-minute average, except as provided by rule.</p> <p>See b)(2)c.</p>
g.	40 CFR Part 60, Subpart A	See b)(2)d.

(2) Additional Terms and Conditions

- a. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that Best Available Technology (BAT) is no

longer required by state regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, paragraph (A)(3)(a)(ii) of OAC rule 3745-31-05 (the less than 10 tons per year BAT exemption) has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-31-05(A)(3)(a)(ii), the requirement to satisfy BAT for pollutant(s) less than 10 tons per year still exists as part of the federally-approved SIP.

- b. The following rule paragraph will apply when U.S. EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the SIP:
  - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO<sub>2</sub> emissions from this air contaminant source because the uncontrolled potential to emit for SO<sub>2</sub> emissions is less than 10 tons/year; and
  - ii. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from this air contaminant source because the potential to emit for each pollutant is less than 10 tons/year taking into consideration the federally enforceable restrictions established pursuant to OAC rule 3745-31-05(D).
- c. This emissions unit is determined to be subject to the provisions of 40 CFR Part 60, Subpart UUU Standards of Performance for Calciners and Dryers in Mineral Industries. As identified above, the applicable outlet grain loading limitation identified in Subpart UUU (0.025 gr/dscf) is less stringent than the outlet grain loading limitation established pursuant to OAC rule 3745-31-05(D); however, the assignment of the more stringent outlet grain loading limitation does not relieve the permittee of the requirement to demonstrate compliance (including the applicable monitoring, recordkeeping, reporting and initial compliance demonstration requirements) with the provisions of Subpart UUU.
- d. The permittee shall demonstrate compliance with the applicable provisions of 40 CFR Part 60, Subpart UUU in accordance with 40 CFR Part 60, Subpart A.

c) Operational Restrictions

- (1) The emissions from this emissions unit shall be directed to a baghouse at all times when the emissions unit is operating.
- (2) The permittee shall dry no more than 10,000 tons of sand in this emissions unit per rolling, 12-month period.

The permittee has existing records of the sand throughput; therefore, the first year of accumulating monthly sand throughput limitations is not necessary.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The monthly sand throughput;
  - b. The rolling, 12-month sand throughput;
  - c. The monthly CO emissions, [determined in accordance with f)(1)c.];
  - d. The rolling, 12-month CO emissions, [determined in accordance with f)(1)c.];
  - e. The monthly VOC emissions, [determined in accordance with f)(1)d.]; and
  - f. The rolling, 12-month VOC emissions, [determined in accordance with f)(1)d.]
- (2) The permittee is not required to demonstrate compliance with the opacity monitoring provisions identified in 40 CFR Part 60.734 provided the dryer meets the specifications identified in 40 CFR Part 60.734(c) or, in accordance with USEPA Applicability Determination Index control numbers 0000056, 9600060, and 9700071, the dryer emits less than 11 tons of particulate per year; therefore, provided the permittee demonstrates compliance with the outlet grain loading limitation established pursuant to OAC rule 3745-31-05(D), continuous opacity monitoring is not required for this emissions unit.
- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 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 weekly 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.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. each rolling, 12-month period when the sand throughput limitation of 10,000 tons was exceeded;
    - ii. each rolling, 12-month period when the CO emissions limitation was exceeded;
    - iii. each rolling, 12-month period when the VOC emissions limitation was exceeded; and
    - iv. an identification of any period of time during which the emissions unit was operating and emissions were not directed to the baghouse.

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 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 appropriate District Office or local air agency).

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions limitation:

PM<sub>10</sub> emissions shall not exceed 4.2 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling, 12-month PM<sub>10</sub> emissions limitation was established by multiplying the maximum blower rating (13,000 acfm) by the outlet grain loading limitation of 0.01 gr/dscf. The result was then converted to lb/hr by multiplying by 60 min/hr and 1 lb/7,000 gr and then converted to tons per year by multiplying by the maximum number of hours in a year (8,760) and dividing by 2,000. The emissions value was then reduced according to US EPA's PM calculator for the appropriate SCC code (85%).

b. Emissions limitation:

PM<sub>2.5</sub> emissions shall not exceed 1.5 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling, 12-month PM<sub>2.5</sub> emissions limitation was established by multiplying the maximum blower rating (13,000 acfm) by the outlet grain loading limitation of 0.01 gr/dscf. The result was then converted to lb/hr by multiplying by 60 min/hr and 1 lb/7,000 gr and then converted to tons per year by multiplying by the maximum number of hours in a year (8,760) and dividing by 2,000. The emissions value was then reduced according to US EPA's PM calculator for the appropriate SCC code (30%).

c. Emissions limitation:

CO emissions shall not exceed 51.2 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be demonstrated by multiplying the actual rolling, 12-month sand throughput required by d)(1) by an emissions factor of 10.24 lbs CO/ton sand and then converting to tons by dividing by 2,000. The emissions factor was derived by adding 10% to the results of the emissions test performed on May 1, 2014.

Compliance with the rolling, 12-month limitation is demonstrated by summing the current month with the previous 11 months.

d. Emissions limitation:

VOC emissions shall not exceed 7.6 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month limitation shall be demonstrated by multiplying the actual rolling, 12-month sand throughput required by d)(1) by an emissions factor of 1.52 lbs CO/ton sand and then converting to tons by dividing by 2,000. The emissions factor was derived by adding 10% to the results of the emissions test performed on May 1, 2014.

Compliance with the rolling, 12-month limitation is demonstrated by summing the current month with the previous 11 months.

e. Emissions limitation:

Outlet grain loading from the baghouse serving this emissions unit shall not exceed 0.01 gr/dscf.

Applicable Compliance Method:

If required, compliance with the outlet grain loading limitation shall be demonstrated through emissions tests performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA, Central District Office.

f. Emissions limitation:

SO<sub>2</sub> emissions shall not exceed 0.003 tons per rolling, 12-month period [as applicable prior to U.S. EPA approving OAC rule 3745-31-05(A)(3)(a)(ii) as part of the SIP].

Applicable Compliance Method:

The rolling, 12-month SO<sub>2</sub> emissions limitation was established by multiplying the maximum rating of the dryer burner (1.05 MMBtu) by the published emissions factor from AP-42 Table 1.4-2 of 0.0006 lbs SO<sub>2</sub>/MMBtu and then converted to tons by multiplying by the maximum number of hours in a year (8,760) and dividing by 2,000.

If required, compliance with the rolling, 12-month limitation shall be demonstrated through emissions tests performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA, Central District Office.

g. Emission Limitation:

PE shall not exceed 5.38 lb/hr.

Applicable Compliance Method:

The hourly PE limitation was established in accordance with Table I of the appendix of OAC rule 3745-17-11 using a process weight of 1.5 tons sand/hr.

If required, compliance with the hourly PE limitation shall be demonstrated through emissions tests performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA, Central District Office.

h. Emission Limitation:

Visible particulate emissions from the baghouse stack shall not exceed 10 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the baghouse stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months prior to the permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the 0.01 gr/dscf grain loading limitation.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Methods 1-4 of 40 CFR, Part 60, Appendix A and Methods 201/201A and 202 of 40 CFR Part 51, Appendix M.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these



conditions is justification for not accepting the test results as a demonstration of compliance.

- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

- (1) None.

**2. P003, Reclaimed Sand Handling**

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

Reclaimed Sand Storage Silo and Handling controlled by a 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)c., c)(1), c)(2), d)(1), e)(3), f)(1)a., and f)(1)b.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) <i>June 30, 2008</i>	The particulate matter less than 10 microns in aerodynamic diameter (PM <sub>10</sub> ), and particulate matter less than 2.5 microns in aerodynamic diameter (PM <sub>2.5</sub> ) emissions limitations established by this rule are equivalent to the limitations established pursuant to OAC rule 3745-31-05(D).  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) <i>June 30, 2008</i>	See b)(2)b.
c.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid Title V)	Outlet grain loading from the baghouse serving this emissions unit shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf).  PM <sub>10</sub> emissions shall not exceed 4.1 tons per rolling, 12-month period.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		PM <sub>2.5</sub> emissions shall not exceed 1.5 tons per rolling, 12-month period.  See c)(1) and c)(2)
d.	OAC rule 3745-17-11(A)(2)	PE shall not exceed 3.6 pounds per hour (lb/hr).
e.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

(2) Additional Terms and Conditions

- a. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that Best Available Technology (BAT) is no longer required by state regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, paragraph (A)(3)(a)(ii) of OAC rule 3745-31-05 (the less than 10 tons per year BAT exemption) has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the U.S. EPA approves the revisions to OAC rule 3745-31-05(A)(3)(a)(ii), the requirement to satisfy BAT for pollutant(s) less than 10 tons per year still exists as part of the federally-approved SIP.
- b. The following rule paragraph will apply when U.S. EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the SIP:
  - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM<sub>10</sub> and PM<sub>2.5</sub> emissions from this air contaminant source because the potential to emit for each pollutant is less than 10 tons/year taking into consideration the federally enforceable restrictions established pursuant to OAC rule 3745-31-05(D).

c) Operational Restrictions

- (1) The emissions from this emissions unit shall be directed to a baghouse at all times when the emissions unit is operating.
- (2) The permittee shall handle no more than 10,000 tons of sand in this emissions unit per rolling, 12-month period.

The permittee has existing records of the sand throughput; therefore, the first year of accumulating monthly sand throughput limitations is not necessary.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The monthly sand throughput;
  - b. The rolling, 12-month sand throughput;
  - c. The monthly PM<sub>10</sub> emissions, [determined in accordance with f)(1)a.];
  - d. The rolling, 12-month PM<sub>10</sub> emissions, [determined in accordance with f)(1)a.];
  - e. The monthly PM<sub>2.5</sub> emissions, [determined in accordance with f)(1)b.]; and
  - f. The rolling, 12-month PM<sub>2.5</sub> emissions, [determined in accordance with f)(1)b.]
- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 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 weekly 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.

e) Reporting Requirements

- (1) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required

documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the District Office or Local Air Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the signatory authority may be represented as provided through procedures established in Air Services.

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted 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.
- (3) The permittee shall submit quarterly deviation (excursion) reports that identify:
  - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - i. each rolling, 12-month period when the sand throughput limitation of 10,000 tons was exceeded; and
    - ii. each rolling, 12-month period when the PM<sub>10</sub> emissions limitation was exceeded;
    - iii. each rolling, 12-month period when the PM<sub>2.5</sub> emissions limitation was exceeded; and
    - iv. an identification of any period of time during which the emissions unit was operating and emissions were not directed to the baghouse.

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 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 appropriate District Office or local air agency).

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions limitation:

PM<sub>10</sub> emissions shall not exceed 4.1 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling, 12-month PM<sub>10</sub> emissions limitation was established by summing the fugitive and stack PM<sub>10</sub> emissions from this emissions unit.

Stack PM<sub>10</sub> emissions were determined by multiplying the maximum blower rating (12,000 acfm) by the outlet grain loading limitation of 0.01 gr/dscf. The result was then converted to lb/hr by multiplying by 60 min/hr and 1 lb/7,000 gr and then converted to tons per year by multiplying by the maximum number of hours in a year (8,760) and dividing by 2,000. The emissions value was then reduced according to US EPA's PM calculator for the appropriate SCC code (85%).

Fugitive PM<sub>10</sub> emissions are determined by multiplying the actual rolling, 12-month sand throughput required by d)(1) by an emissions factor of 0.54 lb PM<sub>10</sub> per ton sand, accounting for 90% capture efficiency, and then converting to tons by dividing by 2,000.

b. Emissions limitation:

PM<sub>2.5</sub> emissions shall not exceed 1.5 tons per rolling, 12-month period.

Applicable Compliance Method:

The rolling, 12-month PM<sub>2.5</sub> emissions limitation was established by summing the fugitive and stack PM<sub>2.5</sub> emissions from this emissions unit.

Stack PM<sub>2.5</sub> emissions were determined by multiplying the maximum blower rating (12,000 acfm) by the outlet grain loading limitation of 0.01 gr/dscf. The result was then converted to lb/hr by multiplying by 60 min/hr and 1 lb/7,000 gr and then converted to tons per year by multiplying by the maximum number of hours in a year (8,760) and dividing by 2,000. The emissions value was then reduced according to US EPA's PM calculator for the appropriate SCC code (30%).

Fugitive PM<sub>2.5</sub> emissions are determined by multiplying the actual rolling, 12-month sand throughput required by d)(1) by an emissions factor of 0.19 lb PM<sub>2.5</sub> per ton sand, accounting for 90% capture efficiency, and then converting to tons by dividing by 2,000.

c. Emission Limitation:

PE shall not exceed 3.6 lb/hr.



Applicable Compliance Method:

The hourly PE limitation was established in accordance with Figure II of the appendix of OAC rule 3745-17-11 using an uncontrolled mass rate of emissions (UMRE) of 18 lb PE/hr. The UMRE was calculated by multiplying the maximum metal throughput (5 ton/hr) by the emissions factor from US EPA's Webfire database version 6.25 for SCC code 30400350 (3.6 lb PE/ton sand).

If required, compliance with the hourly PE limitation shall be demonstrated through emissions tests performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from Ohio EPA, Central District Office.

d. Emission Limitation:

Visible particulate emissions from the baghouse stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the baghouse stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) None.