Ohio Environmental Protection Agency

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

5/5/2016

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	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

Steve Cox
The Sawbrook Steel Castings Company
425 SHEPHERD AVENUE
Cincinnati, OH 45215

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1431260066
Permit Number: P0120082
Permit Type: Renewal
County: Hamilton

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO)for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Cincinnati Enquirer. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page,www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street Suite 700
PO Box 1049
Columbus, Ohio 43216-1049

and

Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted.Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now.If you have any questions, please contact Southwest Ohio Air Quality Agency at (513)946-7777.

Sincerely,

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

Cc: U.S. EPA Region 5*Via E-Mail Notification*
SWOAQA; Indiana; Kentucky

Permit Strategy Write-Up

1. Check all that apply:

   XSynthetic Minor Determination

   Netting Determination

2. Source Description: This is a renewal FEPTIO for the Thermfire Sand Reclaimer (N001) with fabric filter which is now subject to 40 CFR Part 60, Subpart UUU, NSPS for Calciners and Dryers in Mineral Industries via USEPA ACO EPA-5-15-113(a)-OH-12. Sawbrook Steel is a steel foundry. N001 is FEPTIO to avoid Title V for CO emissions.

3. Facility Emissions and Attainment Status:The facility is located in Hamilton County which is in attainment for all pollutants except the 8-hour ozone standard. This permit will continue to institute federally enforceable emission limitations which restrict the CO emissions to less than 100 tons/year and incorporates the requirements of 40 CFR Part 60, Subpart UUU, NSPS for Calciners and Dryers in Mineral Industries via USEPA ACO EPA-5-15-113(a)-OH-12 which has been incorporated into the terms of this permit.

4. Source Emissions: The potential CO emissions of emissions unit N001 are greater than 100 tons/year. This permit will limit the CO emissions from N001 to 73.2 tons/year. NOx, VOC and PE emissions are also being renewed with no changes.

5. Conclusion:The permitteewill continue to comply with the federally enforceable emission limitations of 73.2 tons/year CO as a 12-month rolling summationand accepts the terms and conditions of this permit which continue to limit emissions of CO as Synthetic Minor so that emissions unit N001 and facility will not trigger Title V. The facility will maintain records and be subject to reporting as outlined in the permit to ensure compliance with the voluntary synthetic minor emissions limitations. In addition, the facility will also comply with the requirements of 40 CFR Part 60, Subpart UUU, NSPS for Calciners and Dryers in Mineral Industries via USEPA ACO EPA-5-15-113(a)-OH-12 which has been incorporated into this permit.

6. Please provide additional notes or comments as necessary:

   None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

Pollutant	Tons Per Year
CO	73.2
VOC	3.2
NOx	9.6
PE	7.2

PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at:http://epa.ohio.gov/actions.aspx or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email:HClerk@epa.ohio.gov

Draft Air Pollution Permit-to-Install and Operate Renewal
The Sawbrook Steel Castings Company
425 SHEPHERD AVE,, Cincinnati, OH 45215
ID#:P0120082
Date of Action: 5/5/2016
Permit Desc:Renewal of FEPTIO for one (1) Thermfire sand reclaimer with fabric filter now subject to 40 CFR Part 60, Subpart UUU, NSPS for Calciners and Dryers in Mineral Industries via USEPA ACO EPA-5-15-113(a)-OH-12; N001 is FEPTIO to avoid Title V for CO emissions..
The permit and complete instructions for requesting information or submitting comments may be obtained at: http://epa.ohio.gov/dapc/permitsonline.aspx by entering the ID # or: Bonnie Pray, Southwest Ohio Air Quality Agency, 250 William Howard Taft Rd., Cincinnati, OH 45219. Ph: (513)946-7777

DRAFT

Division of Air Pollution Control
Permit-to-Install and Operate
for
The Sawbrook Steel Castings Company

Facility ID:	1431260066
Permit Number:	P0120082
Permit Type:	Renewal
Issued:	5/5/2016
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
The Sawbrook Steel Castings Company

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Authorization

Facility ID:	1431260066
Application Number(s):	A0054637
Permit Number:	P0120082
Permit Description:	Renewal of FEPTIO for one (1) Thermfire sand reclaimer with fabric filter now subject to 40 CFR Part 60, Subpart UUU, NSPS for Calciners and Dryers in Mineral Industries via USEPA ACO EPA-5-15-113(a)-OH-12; N001 is FEPTIO to avoid Title V for CO emissions.
Permit Type:	Renewal
Permit Fee:	$0.00*DO NOT send payment at this time, subject to change before final issuance*
Issue Date:	5/5/2016
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date:	To be entered upon final issuance

This document constitutes issuance to:

The Sawbrook Steel Castings Company
425 SHEPHERD AVE
Cincinnati, OH 45215

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:

Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219
(513)946-7777

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

Authorization (continued)

Permit Number: P0120082
Permit Description: Renewal of FEPTIO for one (1) Thermfire sand reclaimer with fabric filter now subject to 40 CFR Part 60, Subpart UUU, NSPS for Calciners and Dryers in Mineral Industries via USEPA ACO EPA-5-15-113(a)-OH-12; N001 is FEPTIO to avoid Title V for CO emissions.

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

Emissions Unit ID:	**N001**
Company Equipment ID:	Thermfire
Superseded Permit Number:	P0104135
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. 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 Southwest Ohio Air Quality Agency 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 beingpermanently shut down without first applying for and obtaining a permit pursuantto 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.

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. N001, Thermfire

Operations, Property and/or Equipment Description:

Thermfire Sand Reclaimer

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)d., c)(1), d)(1), e)(2), f)(1)c. and f)(2).

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)	Carbon monoxide (CO) emissions shall not exceed 24.4 pounds per hour. Volatile organic compound (VOC) emissions shall not exceed 0.72 pound per hour and 3.2 TPY. Nitrogen oxides (NOx) emissions shall not exceed 3.2 pounds per hour and 9.6 TPY. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) for CO emissions. See b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) and emissions of particulate matter 10 microns and less in diameter (PM10) shall not exceed 2.4 pounds per hour and 7.2 TPY. See b)(2)a.
c.	OAC rule 3745-31-05(C), as effective 12/01/06	See b)(2)b.
d.	OAC rule 3745-31-05(D) Synthetic Minor to Avoid Title V	CO emissions shall not exceed 73.2 tons per year (TPY) based upon a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance. See c)(1), d)(1), e)(2), and f)(1)c.
e.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart UUU.
f.	OAC rule 3745-17-09(B)	PE shall not exceed 0.10 pound per 100 pounds of liquid, semi-solid, or solid refuse and salvageable material charged.
g.	OAC rule 3745-17-09(C)	Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.
h.	40 CFR Part 60, Subpart UUU (§60.730 - §60.737) [In accordance with §60.730(a) and the definition in §60.731 the affected facility is a calciner at a mineral processing plant where the owner or operator commenced construction, modification, or reconstruction of the unit after April 23, 1986.]	Emissions of particulate matter shall not exceed 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)]. Visible particulate matter emissions shall not exceed 10 percent opacity.
i.	40 CFR 60.1-19	The permittee shall comply with the applicable General Provisions as outlined.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
j.	USEPA Region 5 Administrative Consent Order, EPA-5-15-113(a)-OH-12	The permittee shall also comply with the requirements of the USEPA Region 5 Administrative Consent Order, EPA-5-15-113(a)-OH-12 signed on September 3, 2015. See d)(3), d)(4) and e)(5).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures will no longer apply.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

Federally enforceable permit to install and operate P0120082 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding best available technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. for particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter (PM10): the maximum annual material throughput for this emissions unit shall not exceed 18,000 tons of sand, based upon a rolling, 12-month summation of the sand throughput, the emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation, and the PE/PM10 emissions shall not exceed 7.2 TPY.

c. The hourly emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.

c) Operational Restrictions

(1) The maximum annual material throughput for this emissions unit shall not exceed 18,000 tons of sand, based upon a rolling, 12-month summation of the sand throughput.

The permittee has existing records to demonstrate compliance with this operational restriction upon permit issuance.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information for emissions unit N001:

a. the operating hours for each month;

b. the sand throughput, in tons, for each month;

c. the updated rolling, 12-month summation of the sand throughput. This shall include the information for the current month and the preceding eleven calendar months;

d. the CO emissions for each month, in pounds or tons; and

e. the updated rolling, 12-month summation of the CO emissions, in tons. This shall include the information for the current month and the preceding eleven calendar months.

The sand throughput records may also be used to demonstrate compliance with the voluntary restrictions for PE, PM10, and NOx emissions as listed in b)(2)b.

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

Whenever the monitored value for the pressure drop deviates from the limit or 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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the pressure drop readings immediately after the corrective action was implemented; and

k. 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.

The acceptable range or limit for the pressure drop across the baghouse, that shall be maintained in order to demonstrate compliance, is 2 to 8 inches of water.

This range or limit on 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 appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit or 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(s). In addition, approved revisions to the range or limit 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 comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 60, Subpart UUU, including the following sections:

60.734(a)	Continuous monitoring system for opacity*
60.735(a)	60.734(b) records retention

*subject to Alternative Monitoring per USEPA Region 5 Administrative Consent Order, EPA-5-15-113(a)-OH-12 (See d)(4)).

(4) The following monitoring and recordkeeping requirements are required to be incorporated in this PTIO pursuant to USEPA Region 5 Administrative Consent Order, EPA-5-15-113(a)-OH-12:

a. The permittee must perform visible emission readings using USEPA Reference Method 22 twice per day for everyday the affected facility is operating. The visible emission readings must be performed at any Sand Reclamation Unit egress points as well as the baghouse stack at times when the associated Sand Reclamation Unit is operating. The twice daily visible emission readings must be performed at least 3 hours apart and must be a minimum of 18 minutes in length.

b. The permittee must conduct differential pressure readings at the baghouse associated with the Sand Reclamation Unit at least twice daily, at the same time that it performs the visible emission readings using Method 22.

c. The permittee must maintain a written record at the facility of the results of each visible emission reading using Method 22 and each pressure differential reading. The written record must document the results of each visible emission reading as follows: “Yes, there were visible emissions observed” or “No, there were no visible emissions observed.” The written record must also document the results of each pressure differential reading in the appropriate unit of measure used (i.e. inches of water column, inches of mercury, etc.). The visible emission reading and the differential pressure reading records must be maintained at the facility for a minimum of two years and must be readily available for review by the Director (the appropriate District Office or local air agency).

d. Whenever visible emissions are observed, and any time a differential pressure reading is outside the operating range established during the most recent performance test which demonstrated the emissions unit in compliance, the permittee must investigate and document the root cause(s), corrective actions taken, and preventive measures taken to prevent recurrence, as appropriate, for assuring ongoing compliance with the requirement for visible emissions set forth in 40 C.F.R. §§ 60.11 and 60.732. Records for such causes and corrective actions must be maintained at the facility for a minimum of two years and must be readily available for review by the Director (the appropriate District Office or local air agency).

e. If the permittee is unable to identify the cause of the deviation identified in 5.d. within one hour, or implement all necessary corrective actions to correct the deviation within three hours, the permittee must immediately shut-down the Sand Reclamation Unit. The Sand Reclamation Unit must remain shut-down until such time as the permittee is able to identify the cause and implement any necessary corrective actions to eliminate and prevent additional deviations.

f. The permittee must conduct monthly preventive maintenance checks of the Sand Reclamation Unit and associated baghouse.

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 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. all exceedances of the rolling, 12-month emission limitation for CO; and,

ii. all exceedances of the rolling, 12-month restriction on the sand throughput for this emissions unit.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

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).

(3) 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.

(4) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subpart UUU, including the following sections:

60.735(c)(1)	semi-annual deviation report

(5) The permittee shall also comply with the requirements of the USEPA Region 5 Administrative Consent Order, EPA-5-15-113(a)-OH-12, including the following Reporting Requirements listed therein:

a. The permittee must submit reports summarizing the daily visible emission readings and differential pressure readings. The reports must include the date and time of such readings, any periods of observed visible emissions, any periods of differential pressure readings outside of the established operating range, the cause (i.e. root cause) of any observed visible emission, the cause of differential pressure readings outside of the established operating range, any corrective actions taken, and any preventive measures implemented to prevent recurrence. The permittee must submit these reports semi-annually. Reports must be submitted no later than February 28th and August 31st of each year.

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. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 24.4 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for CO, in the appropriate averaging period(s);

ii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1-4 and 10 as outlined in 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA;

iii. During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the appropriate Ohio EPA District Office or local air agency. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under “worst case” conditions expected during the life of the permit. As part of the information provided in the “Intent to Test” notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and

describe why they believe "worst case" operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA District Office or local air agency that the proposed operating conditions constitute "worst case". Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

iv. 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).

v. 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.

vi. 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.

vii. In November 2009, the permittee conducted emissions testing in accordance with the above requirements which demonstrated compliance with the Applicable Emission Limitation.

b. Emission Limitations, Voluntary Restrictions, and Exemptions:

VOC emissions shall not exceed 0.72 pound per hour.

VOC emissions shall not exceed 3.2 tons per year.

Particulate emissions (PE) and emissions of particulate matter 10 microns and less in diameter (PM10) shall not exceed 0.10 pound per 100 pounds of liquid, semi-solid, or solid refuse and salvageable material charged.

Particulate emissions (PE) and particulate matter emissions 10 microns and less in diameter (PM10) shall not exceed 7.2 TPY.

Nitrogen oxides (NOx) emissions shall not exceed 3.2 pounds per hour.

Nitrogen oxides (NOx) emissions shall not exceed 9.6 TPY.

Applicable Compliance Methods:

If required, compliance with the hourly and short term VOC, PE/PM10 and NOx emissions limitations shall be demonstrated by emissions testing conducted in accordance with the following U.S. EPA test method(s): Methods 1-4 and for VOC, Method 18, for PE/PM10, Method 5/Method 201, and for NOx, Method 7, all as outlined in 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

Compliance with the annual Voluntary Restrictions for PE/PM10 and NOx may be assumed provided that compliance with the annual sand throughput voluntary restriction is maintained and recorded as specified in d)(1).

The potential annual VOC emission rate is based on this emission unit's potential to emit. The potential annual VOC emission rate for emissions unit N001 was determined from information supplied in Application A0054637 for FEPTIO P0120082:

VOC = (0.72 pound VOC per hour; highest hourly VOC emissions rate during stack test on 12/7/2000) x (8,760 hours per year max) / (2000 pounds per ton) = 3.2 tons per year VOC.

The potential annual PE/PM10 emission rate is based on this emission unit's controlled potential to emit when accounting for material throughput restriction. The potential annual PE/PM10 emission rate for emissions unit N001 was determined from information supplied in Application A0054637 for FEPTIO P0120082:

PE/PM10 = (0.01 grain per standard cubic foot emissions factor) x (28,000 actual cubic feet per minute max air flow rate of baghouse) x (60 minutes per hour) / (7,000 grains per pound) x (18,000 tons per year sand throughput voluntary restriction) / (3 tons per hour sand throughput equipment capacity) / (2,000 pounds per ton) = 7.2 tons per year PE-PM10.

The potential annual NOx emission rate is based on this emissions unit's potential to emit when accounting for material throughput restriction. The potential annual NOx emission rate for emissions unit N001 was determined from information supplied in Application A0054637 for FEPTIO P0120082:

NOx = (3.2 pounds NOx per hour; highest hourly NOx emissions rate during stack test on 12/7/2000) x (18,000 tons per year sand throughput voluntary restriction)/(3 tons per hour sand throughput equipment capacity)/(2000 pounds per ton) = 9.6 tons per year NOx.

c. Emission Limitation:

CO emissions shall not exceed 73.2 tons per year (TPY) based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the rolling, 12-month CO emissions limitation identified in b)(1)c. shall be demonstrated by the record keeping requirement identified in d)(1).

Actual CO emissions for emissions unit N001 shall be determined based on the following equation from the permittee-supplied information in FEPTIO application P0104135 as submitted on November 20, 2008:

CO = (24.4 pounds CO per hour; highest hourly CO emissions rate during stack test on 12/7/2000) x (18,000 tons per year sand throughput voluntary restriction) / (3 tons per hour sand throughput equipment capacity) / (2000 pounds per ton).

d. Emission Limitations:

Particulate emissions shall not exceed 0.10 pound per 100 pounds of material charged to the incinerator.

Emissions of particulate matter shall not exceed 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)].

Applicable Compliance Method:

If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PE, in the appropriate averaging period(s);

ii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1-5 as outlined in 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA;

iii. During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the appropriate Ohio EPA District Office or local air agency. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under “worst case” conditions expected during the life of the permit. As part of the information provided in the “Intent to Test” notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe “worst case” operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA District Office or local air agency that the proposed operating conditions constitute “worst case”. Failure to test under the

approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

iv. Pursuant to 40 CFR 60.736(b)(1), the sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.

v. 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).

vi. 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.

vii. 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.

viii. In October 2015, the permittee conducted emissions testing in accordance with the above requirements which demonstrated compliance with the Applicable Emission Limitations.

e. Emission Limitation:

Visible emissions shall not exceed 10 percent opacity.

Applicable Compliance Method:

Compliance with this visible emission limitation shall be based on visible particulate emissions testing per OAC rule 3745-17-03(B)(1), (USEPA Method 9, 40 CFR 60, Appendix A).

(2) Compliance with the rolling, 12-month annual material throughput operational restriction identified in c)(1) shall be demonstrated by the record keeping requirement identified in d)(1).

Actual material throughput for emissions unit N001 shall be determined from information supplied in Application A0054637 for FEPTIO P0120082:

Material Throughput = (3 tons per hour sand throughput equipment capacity) x (number of hours operated per year).

g) Miscellaneous Requirements

(1) None.