Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Certified Mail

4/6/2012

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

Edward Milliken
Bowerston Shale Company
515 E. Main St.
BOWERSTON, OH 44695

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

Facility ID: 0634000012
Permit Number: P0108053
Permit Type: OAC Chapter 3745-31 Modification
County: Harrison

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 EPA Weekly Review and the local newspaper, Harrison News Herald. 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 "Issued Air Pollution Control Permits" link. 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
122 South Front Street
Columbus, Ohio 43215

and

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138

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 in writing 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 Ohio EPA DAPC, Southeast District Office at (740)385-8501.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA-SEDO; Pennsylvania; West Virginia

Permit Strategy Write-Up

1. Check all that apply:

   X Synthetic Minor Determination

   Netting Determination

2. Source Description: Bowerston Shale Company operates a brick manufacturing facility in Bowerston, Ohio, Harrison County – which is attainment status in a non-Appendix A area. Emission unit P003 is an existing natural gas fired tunnel kiln. BowerstonShale wishes to modify the existing PTI 06-91685 (issued June 14, 2000) and current FESOP (issued May 28, 2008), for the kiln operations (P003) to increase the sulfur dioxide (SO_2) hourly and annual emission limitations for the kiln. SO_2 is the only pollutant affected by this modification.

3. Facility Emissions and Attainment Status: The facility has two – grinding and crushing particulate emission units, an emergency generator and EU P003. Emission unit P003 currently has maximum allowable emission rates of 60.50 pounds SOx per hour (29.76 Tons per rolling 12-month period). Potential SO_2 emissions from modified emissions unit P003 would exceed 250 TPY without restrictions. Maximum potential emissions of all other pollutants are less than Title V, MACT and PSD thresholds.

4. Source Emissions: This Permit to Install/Operate Application is to request an increase to the existing synthetic minor SO_2 emissions limitation for emissions unit P003 (tunnel kiln with waste heat dryer) in the current PTI and FESOP. This increase will allow for the additional flexablilty in the production of specialty brick and other construction materials containing primarily clay as a raw material. Currently the clay raw material supplier maintains maximum sulfur content in the clay of 0.25 percent (%) by weight of dry raw material. However, future shipments of clay may reach a maximum sulfur content of 0.4 %, which under the existing SO_2 mass emissions limit would further restrict Bowerston's specialty products production. **This permit application <u>is not</u> seeking any increase in the emissions limitations of other allowable pollutants based upon this change.**

   These modifications will increase SO_2 emissions by 24.9 TPY, which is below the 25 TPY modeling guidance level.

   MACT - JJJJJ, Brick and Structural Clay Products Manufacturing has been vacated by court action.
   NSPS – OOO, applies to material handling operations of emission units F001 and F002.

   Emissions unit P003 will be restricted by federally enforceable STC's to limit the annual production rate to 49,022 tons of fired product, based upon calculations using emission factors derived from raw material testing. SO_2 emissions limits are 96.80 pounds per hour and, with restrictions, 54.66 TPY. The permittee will be required to conduct raw material testing prior to using a source clay other than that from which the current production limit calculations were based. The permit will contain appropriate recordkeeping, reporting, and testing requirements.

5. Conclusion: The emission limits and production limits contained in this FEPTIO are adequate to provide a federally enforceable framework for assuring that applicable Title V and PSD thresholds will not be exceeded.

6. Please provide additional notes or comments as necessary:

   None

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

Pollutant	Tons Per Year	
SOx	**54.66**	**(24.9 Increase)**
PM	**25.45**	**(No Change)**
NOx	**9.29**	**(No Change)**
CO	**31.80**	**(No Change)**
OC	**2.97**	**(No Change)**
HAPs (total)	**(14.31)**	**(No Change)**
HCl	**4.51**	**(No Change)**
HF	**9.80**	**(No Change)**

PUBLIC NOTICE
4/6/2012 Issuance of Draft Air Pollution Permit-To-Install and Operate

Bowerston Shale Company
515 E. MAIN ST.,
Bowerston, OH 44695
Harrison County
FACILITY DESC.: Brick and Structural Clay Tile Manufacturing
PERMIT #: P0108053
PERMIT TYPE: OAC Chapter 3745-31 Modification
PERMIT DESC: Techniceram Tunnel Kiln with Dryer, Chapter 31 modification to increase the restriction of maximum sulfur content in the dry raw material from 0.25 % to 0.4 %.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. 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 permit # or: Steve Alspach, Ohio EPA DAPC, Southeast District Office, 2195 Front Street, Logan, OH 43138. Ph: (740)385-8501

Ohio | Environmental Protection Agency

DRAFT

Division of Air Pollution Control
Permit-to-Install and Operate
for
Bowerston Shale Company

Facility ID:	0634000012
Permit Number:	P0108053
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	4/6/2012
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
Bowerston Shale Company

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Authorization

Facility ID:	0634000012
Application Number(s):	A0040985
Permit Number:	P0108053
Permit Description:	Techniceram Tunnel Kiln with Dryer, Chapter 31 modification to increase the restriction of maximum sulfur content in the dry raw material from 0.25 % to 0.4 %.
Permit Type:	OAC Chapter 3745-31 Modification
Permit Fee:	$1,000.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date:	4/6/2012
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:

Bowerston Shale Company
515 E. MAIN ST.
Bowerston, OH 44695

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0108053
Permit Description: Techniceram Tunnel Kiln with Dryer, Chapter 31 modification to increase the restriction of maximum sulfur content in the dry raw material from 0.25 % to 0.4 %.

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

Emissions Unit ID:	**P003**
Company Equipment ID:	Tunnel Kiln
Superseded Permit Number:	P0089389
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.

2. The Ohio EPA has determined that this facility may be applicable to the requirements of an area source MACT/GACT rule that the Ohio EPA does not have the delegated authority to implement. Although Ohio EPA has determined that an area source MACT (also known as the GACT) may apply, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised that all requirements associated with these rules are in effect and are enforceable by U.S. EPA. For more information on the area source rules, please refer to the follow U.S. EPA website: http://www.epa.gov/ttn/atw/area/arearules.html .

C. Emissions Unit Terms and Conditions

1. P003, Tunnel Kiln

Operations, Property and/or Equipment Description:

6.05 Tons per hour (tph) Techniceram natural gas fired Tunnel Kiln with dryer (Chapter 31 modification to PTI 06-91685, issued June 14, 2000 and current FESOP issued May 28, 2008)

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. g)(1)

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

a. b)(1)a., c)(1), d)(2), e)(2), 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 (D) (Synthetic Minor to avoid Title V, and PSD)	Emissions of sulfur dioxides (SO_2) shall not exceed 54.66 tons per year (TPY) as a 12-month rolling summation. See c)(1)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01.	Emissions of nitrogen oxides (NO_X) shall not exceed 2.12 pounds per hour; 9.29 TPY. Emissions of organic compounds (OC) shall not exceed 0.67 pounds per hour; 2.97 TPY. Emissions of hydrogen fluoride (HF) shall not exceed 2.24 pounds per hour; 9.80 TPY. The requirements of this rule also include compliance with the requirements of OAC

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		3745-17-07(A)(1) and OAC 3745-17-11(B)(1). See b)(2)a.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
d.	OAC rule 3745-17-07 (A)(1)	Visible emissions of PM from any stack shall not exceed 20% opacity except as provided by rule.
e.	OAC rule 3745-17-11 (B)(1)	Particulate emissions (PE) from combustion stack shall not exceed 13.7 lb per hour.
f.	ORC 3704.03(T)	The SO_2emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05 (D). Emissions of particulate matter (PM) shall not exceed 25.45 TPY as a 12-month rolling summation. Emissions of carbon monoxide (CO) shall not exceed 31.80 TPY as a 12-month rolling summation.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirementspursuant to 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 3745-31-05was revised to conform to ORC changes effective August 3, 2006 (S.B. 265changes), such that BAT is no longer required by State regulations for NAAQSpollutant less than ten tons per year. However, that rule revision has not yet beenapproved 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 revisionsto OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of thefederally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures 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.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_X and OC emissions from this air contaminant

source since the uncontrolled potential to emit for NO_X and OC emissions is less than 10 tons/year.

c. The hourly SO_2, PM, NO_X, CO, OC and HF emissions limits were established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this short term emissions limitation.

d. The sulfur content of the clay burned in this emission unit shall not exceed 0.4 percent by weight dray raw material.

c) Operational Restrictions

(1) Fired brick production (dry) shall not exceed 49,022 tons per rolling 12-month period.

The permittee has existing data on which to base the 12-month total at the time this permit is issued.

d) Monitoring and/or Recordkeeping Requirements.

(1) Each time a new bulk shipment of clay is introduced into the kiln raw material mix the permittee shall collect a representative grab sample of the clay used in this emission unit from a location prior to introduction to the kiln. The permittee shall perform the analyses for sulfur content in accordance with the following method: Quantitative Chemical Analysis using Atomic Spectroscopy. Alternative, equivalent methods may be used upon receiving written approval from Ohio EPA.

(2) The permittee shall maintain monthly records of the following.

a. the total weight of fired products (dry) using clay;

b. the total weight of fired products (dry) using shale;

c. the total weight of fired products (dry) using clay in this emission unit during the previous 12-month period;

d. the total weight of fired products (dry) using shale in this emission unit during the previous 12-month period;

e. the total SO_2 emissions for the previous 12-month period including all calculations.

The permittee has existing data on which to base the 12-month total at the time this permit is issued.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify:

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 12-month periods during which the quantity of fired product (dry) was above the maximum specified level; and

ii. all 12-month periods during which the 12-month SO_2 emissions were above the maximum specified level.

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

The quarterly reports shall be submitted,electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the 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 completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services 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 and specify the annual total tons of fired product and annual total tons of SO_2 emissions.

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1). of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Emissions of HF shall not exceed 2.24 pounds per hour; 9.80 TPY.

Applicable Compliance Method:

If required, hydrogen flouride emissions shall be determined according to test Methods 1 - 4, and 13A or 13B as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the 9.8 TPY HF emissions limitation shall be determined by multiplying the results from the most recent emissions testing, in lbs/hour, by the actual hours of operation and dividing by 2,000 lbs per ton.

b. Emissions Limitation:

Emission of SO_2 shall not exceed 54.66 TPY as a 12-month rolling summation.

Applicable Compliance Method:

Compliance with the TPY emissions limitation for SO_2 shall be determined by the Records required in d)(2):

Equation (1) : the maximum allowable annual tons of fired product multiplied by a weighted average SO_2 emissions factor, in pounds per ton of fired product, divided by 2,000 pounds per ton.

Current values used in equation (1), above, include an annual production rate of 49,022 tons of fired product and a weighted average emission factor of 2.23 pounds per ton.

The weighted average emission factor is based on the following calculation:

Equation (2): (emission factor for shale x % of shale used in the raw materials) + (emission factor for clay x % clay used in the raw materials).

Current values used in Equation (2), above, are (0.302 lb/ ton x 87.7 % shale in raw materials) + (16 lb/ton x 12.3 % clay in raw materials).

The emission factor for shale was determined by raw material testing conducted by the permittee and submitted for the original permit application.

The emission factor for clay was determined using the calculation following:
(1 ton fired brick)(2,000 lb/ton)(0.008*) = 16 lb SO_2/ton fired brick

*Maximum SO_2 emissions is 0.8% by weight based upon a future maximum sulfur content of dry raw materials of 0.4% by weight. [SO_2 emissions as % by weight equals two times the % by weight sulfur content in dry raw materials; see AP-42 Table 11.3-3 (August 1997) footnote b].

Lab analysis of each new bulk shipment of material shall be used to show this emissions unit continues to be in compliance with the SO_2 emissions limitations with the use of any alternative source of clay or shale.

If required, sulfur dioxide emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

c. Emissions Limitation:

Emissions of PM shall not exceed 25.45 TPY as a 12-month rolling summation.

Emissions of NO_X shall not exceed 2.12 pounds per hour; 9.29 TPY.

Emissions of CO shall not exceed 31.80 TPY as a 12-month rolling summation.

Emissions of OC shall not exceed 0.67 pounds per hour; 2.97 TPY as a 12-month rolling summation.

Applicable Compliance Method:

Compliance with the pound per hour emission limits above shall be determined by a one-time calculation of the maximum hourly rate of fired product (6.05 tons per hour) multiplied by the emission factor (PM and OC emission factor include emissions from the kiln and dryer) for the appropriate pollutant found in AP-42 Chapter 11.3, Tables 11.3-2, 11.3-3, 11.3-4 and 11.3-5 (8/97). Annual emission rates are calculated by multiplying the hourly emission rate by the maximum hours of operation (8,760) and dividing by 2,000 lbs/ton.

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

If required, nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

If required, carbon monoxide emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emissions Limitation:

Visible emissions of PM from any stack shall not exceed 20% opacity, except as provided by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9 of 40 CFR Part 60, Appendix A.

e. Emissions Limitation:

PE from combustion stack shall not exceed 13.7 lb per hour.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to USEPA Methods1-5 of 40 CFR Part 60, Appendix A.

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

a. The emission testing shall be conducted within 6 months prior to May 28, 2013, the expiration date of the initial permit for this emissions unit.

b. In accordance with 63.7, subsequent testing shall be completed in accordance with the requirements found in 40 CFR 63.8440.

c. The emission testing shall be conducted to demonstrate compliance with the allowable HF limitation.

d. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s):

Compliance with the HF limitation shall be determined in accordance with Test Methods 1 - 4, and 13A or 13B as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Test Methods 13A or 13B as set forth in “Appendix on Test Methods” in 40 CFR, Part 60 (“Standards of Performance for New Stationary Sources”) with the exceptions specified in 60.257(a)(1)(i and ii).

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

f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

g. 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).

h. 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.

i. 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) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions units maximum annual increased emissions between the permitted modifications of PTI 06-91685 issued June 14, 2000 and P0108053 for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified FEPTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new FEPTIO.