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

7/22/2014

Certified Mail

Yes	TOXIC REVIEW
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	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

Mr. Ian Proudfoot
EI Ceramics LLC
2600 Commerce Blvd.
Cincinnati, OH 45241

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

Facility ID: 1431404130
Permit Number: P0116576
Permit Type: Initial Installation
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 W. Ahern

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

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

PUBLIC NOTICE
7/22/2014 Issuance of Draft Air Pollution Permit-To-Install and Operate

EI Ceramics LLC
2600 Commerce Blvd.,
Sharonville, OH 45241
Hamilton County
FACILITY DESC.: Nonclay Refractory Manufacturing
PERMIT #: P0116576
PERMIT TYPE: Initial Installation
PERMIT DESC: Installation of New Batch Kiln #3 and New Cure Oven #3 for Ceramics Manufacturing Process

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: 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
EI Ceramics LLC

Facility ID:	1431404130
Permit Number:	P0116576
Permit Type:	Initial Installation
Issued:	7/22/2014
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Division of Air Pollution Control
Permit-to-Install and Operate
for
EI Ceramics LLC

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 11

1. P006, Kiln #3 12
2. P007, Curing Oven #3 23

Authorization

Facility ID:	1431404130
Application Number(s):	A0050399
Permit Number:	P0116576
Permit Description:	Installation of New Batch Kiln #3 and New Cure Oven #3 for Ceramics Manufacturing Process
Permit Type:	Initial Installation
Permit Fee:	$700.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date:	7/22/2014
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:

EI Ceramics LLC
2600 Commerce Blvd.
Sharonville, OH 45241

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: P0116576
Permit Description: Installation of New Batch Kiln #3 and New Cure Oven #3 for Ceramics Manufacturing Process

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

Emissions Unit ID:	**P006**
Company Equipment ID:	Kiln #3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P007**
Company Equipment ID:	Curing Oven #3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. 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) 2., 3., 4., and 5.

2. The actual emissions of Hazardous Air Pollutants (HAPs), as identified inSection 112(b) of Title III of the Clean Air Act from emissions units P001 (Mixing Process, Rotary Dryer, Vibrating Screen, and Hammermill), P002 (Curing Oven No. 1), P003 (Kiln No. 1 with Thermal Oxidizer), P004 (Batch Kiln No. 2 with Thermal Oxidizer), P005 (Curing Oven No. 2), P006 (Batch Kiln No. 3 with Thermal Oxidizer), P007 (Curing Oven No. 3), any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt emissions units, or future constructed emissions units, shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

3. The permittee shall collect and record the following information each month for the emissions units identified in 2.:

   a) the name and identification number of each HAP containing material employed;

   b) the identification of each individual HAP contained in each material employed;

   c) the HAP emission factor for each individual HAP and each type of operation;

   d) the total individual HAP emissions for each HAP from all sources, in pounds or tons per month;

   e) the total combined HAP emissions from all sources, in pounds or tons per month [the summation of the individual HAP emissions from d) above];

   f) the updated rolling, 12-month summation of the individual HAP emissions for each HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and

   g) the updated rolling, 12-month summation of the combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

   * A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting Southwest Ohio Air Quality Agency. This information does not have to be kept on an individual emissions unit basis.

4. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations outlined in 2. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June, and July through September, respectively).

5. Emission Limitation:

   HAP emissions shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for combined HAPs, based on a rolling, 12-month summation for the emissions units listed in 2.

   Applicable Compliance Method:

   Compliance with the HAP emission limitations in 2.shall be demonstrated by the record keeping requirements specified in 3.

C. Emissions Unit Terms and Conditions

1. P006, Kiln #3

Operations, Property and/or Equipment Description:

Batch Kiln No. 3 with thermal oxidizer

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)d., b)(2)d., b)(2)e., d)(1) - d)(4), e)(2), f)(1)e., 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) ORC 3704.03(T)	Volatile organic compound (VOC) emissions shall not exceed 17.2 tons per year (TPY), based upon a rolling 12-month summation. This emission limitation is equivalent to the emission limitation established under OAC rule 3745-31-05(D).
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 ORC 3704.03(T)	Particulate emissions (PE) shall not exceed 0.07 ton PE per month averaged over a 12-month rolling period. Emissions of particulate matter 10 microns and less in diameter (PM_{10}) shall not exceed 0.05 ton PM_{10} per month averaged over a 12-month rolling period. Nitrogen oxides (NOx) emissions shall not exceed 0.10 ton NOx per month

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		averaged over a 12-month rolling period. Carbon monoxide (CO) emissions shall not exceed 0.25 ton CO per month averaged over a 12-month rolling period. Sulfur dioxide (SO_2) emissions shall not exceed 0.12 ton SO_2 per month averaged over a 12-month rolling period. See b)(2)a. and b)(2)b.
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)c.
d.	OAC rule 3745-31-05(D) *Federally Enforceable Limitations to Avoid Title V and Nonattainment New Source Review*	VOC emissions shall not exceed 17.2 TPY, based upon a rolling 12-month summation. See B.2., b)(2)d., and b)(2)e.
e.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
f.	OAC rule 3745-17-11(B) Table I	PE shall not exceed 2.58 pounds per hour. This emission limitation is greater than the uncontrolled potential to emit of the emissions unit.

(2) Additional Terms and Conditions

a. The monthly PE, PM_{10}, NOx, CO, and SO_2 emission limitations above are based upon the emissions unit's potential to emit at maximum capacity assuming 8,760 hours per year. Therefore, no record keeping or reporting requirements are necessary to demonstrate compliance with these limitations.

b. 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, then these emission limitations/control measures no longer apply.

c. 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 BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to PE, PM_{10}, NOx, CO, and SO_2 emissions from this air contaminant source since the uncontrolled potential to emit for PE, PM_{10}, NOx, CO, and SO_2 is less than 10 tons per year for each pollutant.

d. All of the VOC emissions from this emissions unit shall be vented to a thermal oxidizer with a control efficiency of at least 95% by weight that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

e. The emissions of VOC from this emissions unit shall not exceed 17.2 tons per year, based upon a rolling, 12-month summation of the VOC emissions. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of VOC (Tons)
1	1.72
1-2	3.44
1-3	5.16
1-4	6.88
1-5	8.60
1-6	10.32
1-7	12.04
1-8	13.76
1-9	15.48

1-10	17.2
1-11	17.2
1-12	17.2

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual emission limitation for VOCshall be based upon a rolling, 12-month summation of the VOC emissions.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the emissions unit's production rate, in tons/month;

b. the emissions unit's natural gas usage rate, in mmcf/month;

c. the VOCemission rate for each month of operation, in tons; and

d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the VOC emissions, in tons.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative VOC emissions for each calendar month, in tons.

(2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the combustion temperature on continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable temperature setting shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate temperature range is established to demonstrate compliance. These records shall be maintained at the facility for a period of no less than 3 years.

(3) In order to maintain compliance with the applicable limitation(s) contained in this permit, the acceptable combustion temperature within the thermal oxidizer, during any period of time when the emissions unit controlled by the thermal oxidizer is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance. Until compliance testing has been conducted, the thermal oxidizer shall be

operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

(4) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit 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/limit 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 temperature 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 temperature range/limit 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 temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/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.

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 VOC and, for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels;

ii. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration; and

iii. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the thermal oxidizer;

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 identify in the annual PER the following information concerning the operation of the thermal oxidizer during the 12-month reporting period for this emissions unit:

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted.

d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).

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 Limitations:

PE shall not exceed 0.07 ton PE per month averaged over a 12-month rolling period.

PM_{10} shall not exceed 0.05 ton PM_{10} per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The limitations above represent the maximum potential uncontrolled emission rates of this emissions unit. The potential PE and PM_{10} emission rates are based on the following equations from the permittee-supplied information in the application:

PE = [(0.5 ton per hour max production rate for the kiln) x (0.37 lb PE per ton emission factor, AP-42 Table 11.3-1, dtd 8/97)] + [(0.001 mmcf/hr maximum natural gas usage) x (1.9 lbs PE/mmcf emission factor; AP-42 Table 1.4-2, dtd. 7/98)] x (8760 hrs/yr) / (2000 lbs/ton) / 12 months/yr = 0.07 ton per month.

PM_{10} = [(0.5 ton per hour max production rate for the kiln) x (0.28 lb PM_{10} per ton emission factor, AP-42 Table 11.3-1, dtd 8/97)] + [(0.001 mmcf/hr maximum natural gas usage) x (1.9 lbs PM_{10}/mmcf emission factor; AP-42 Table 1.4-2, dtd. 7/98)] x (8760 hrs/yr) / (2000 lbs/ton) / 12 months/yr = 0.05 ton per month.

b. Emission Limitation:

NOx emissions shall not exceed 0.10 ton NOx per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The limitation above represents the maximum potential uncontrolled emission rate of this emissions unit. The potential NOx emission rate is based on the following equation from the permittee-supplied information in the application:

NOx = [(0.5 ton per hour max production rate for the kiln) x (0.35 lbNOx per ton emission factor, AP-42 Table 11.3-3, dtd 8/97)] + [(0.001 mmcf/hr maximum natural gas usage) x (100 lbsNOx/mmcf emission factor; AP-42 Table 1.4-1, dtd. 7/98)] x (8760 hrs/yr) / (2000 lbs/ton) / 12 months/yr = 0.10 ton per month.

c. Emission Limitation:

CO emissions shall not exceed 0.25 ton CO per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The limitation above represents the maximum potential uncontrolled emission rate of this emissions unit. The potential CO emission rate is based on the following equation from the permittee-supplied information in the application:

CO = [(0.5 ton per hour max production rate for the kiln) x (1.2 lbs CO per ton emission factor, AP-42 Table 11.3-3, dtd 8/97)] + [(0.001 mmcf/hr maximum natural gas usage) x (84 lbs CO/mmcf emission factor; AP-42 Table 1.4-1, dtd. 7/98)] x (8760 hrs/yr) / (2000 lbs/ton) / 12 months/yr = 0.25 ton per month.

d. Emission Limitation:

SO_2 emissions shall not exceed 0.12 ton SO_2 per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The limitation above represents the maximum potential uncontrolled emission rate of this emissions unit. The potential SO_2 emission rate is based on the following equation from the permittee-supplied information in the application:

SO_2 = [(0.5 ton per hour max production rate for the kiln) x (0.67 lb SO_2 per ton emission factor, AP-42 Table 11.3-3, dtd 8/97)] + [(0.001 mmcf/hr maximum natural gas usage) x (0.6 lb SO_2/mmcf emission factor; AP-42 Table 1.4-1, dtd. 7/98)] x (8760 hrs/yr) / (2000 lbs/ton) / 12 months/yr = 0.12 ton per month.

e. Emission Limitation:

VOC emissions shall not exceed 17.2 TPY, based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the VOC emission limitation shall be determined by the record keeping requirements specified in d)(1). The VOC emission rate is calculated with the following equation from the permittee-supplied information in the application, using the information collected in d)(1) and results of the control device performance testing required in f)(2):

VOC = [(actual production rate in tons per month) x (156.5 lbs VOC per ton emission factor, permittee-supplied) x (1 – the control efficiency of the thermal oxidizer) / (2000 lbs/ton)] + [(actual natural gas usage in mmcf per month) x (11 lbs total OC/mmcf emission factor, AP-42 Table 1.4-2, dtd. 7/98) / (2000 lbs/ton)]. All OC is assumed to be VOC.

f. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

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

g. Emission Limitation:

PE shall not exceed 2.58 pounds per hour.

Applicable Compliance Method:

The emission limitation above represents the rule allowable limitation pursuant to Table I of OAC rule 3745-17-11(B) at the maximum production rate of 1000 lbs/hour for this emissions unit. Figure II of OAC rule 3745-17-11 does not apply because the uncontrolled mass rate of emission is less than 10 lbs/hour.

The emission limitation above is less than the maximum potential uncontrolled emission rate of this emissions unit. The potential PE rate is based on the following equation from the permittee-supplied information in the application:

PE = [(0.5 ton per hour max production rate for the kiln) x (0.37 lb PE per ton of emissions factor, AP-42 Table 11.3-1, dtd 8/97)] + [(0.001 mmcf/hr maximum natural gas usage) x (1.9 lbs PE/mmcf emissions factor; AP-42 Table 1.4-2, dtd. 7/98)] = 0.19 pound per hour.

(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 3 months after start-up of this emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the control efficiency limitation for VOC emissions.

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

Method 25 or 25A, 40 CFR Part 60, Appendix A.

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

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions 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 a permittee 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.

2. P007, Curing Oven #3

Operations, Property and/or Equipment Description:

Curing Oven No. 3 with thermal oxidizer

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. d)(5) – d)(7), and e)(5).

(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., b)(2)d., b)(2)e., b)(2)f., d)(1) - d)(4), e)(2), f)(1)e., 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) ORC 3704.03(T)	Volatile organic compound (VOC) emissions shall not exceed 15.9 tons per year (TPY), based upon a rolling 12-month summation. This emission limitation is equivalent to the emission limitation established under OAC rule 3745-31-05(D).
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01 ORC 3704.03(T)	Particulate emissions (PE) shall not exceed 0.09 ton PE per month averaged over a 12-month rolling period. Emissions of particulate matter 10 microns and less in diameter (PM_{10}) shall not exceed 0.05 ton PM_{10} per month averaged over a 12-month rolling period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Nitrogen oxides (NOx) emissions shall not exceed 0.39 ton NOx per month averaged over a 12-month rolling period. Carbon monoxide (CO) emissions shall not exceed 0.27 ton CO per month averaged over a 12-month rolling period. Sulfur dioxide (SO_2) emissions shall not exceed 0.002 ton SO_2 per month averaged over a 12-month rolling period. See b)(2)a. and b)(2)b.
c.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)c.
d.	OAC rule 3745-31-05(D) *Federally Enforceable Limitations to Avoid Title V and Nonattainment New Source Review*	VOC emissions shall not exceed 15.9 TPY, based upon a rolling 12-month summation. See B.2., b)(2)d., b)(2)e., and b)(2)f.
e.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
f.	OAC rule 3745-17-11(B) Table I	PE shall not exceed 4.32 pounds per hour. This emission limitation is greater than the uncontrolled potential to emit of the emissions unit.

(2) Additional Terms and Conditions

a. The monthly PE, PM_{10}, NOx, CO, and SO_2 emission limitations above are based upon the emissions unit's potential to emit at maximum capacity assuming 8,760 hours per year. Therefore, no record keeping or reporting requirements are necessary to demonstrate compliance with these limitations.

b. 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, then these emission limitations/control measures no longer apply.

c. 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 BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to PE, PM_{10}, NOx, CO, and SO_2 emissions from this air contaminant source since the uncontrolled potential to emit for PE, PM_{10}, NOx, CO, and SO_2 is less than 10 tons per year for each pollutant.

d. All of the VOC emissions from this emissions unit shall be vented to a thermal oxidizer with a control efficiency of at least 95% by weight that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.

e. The emissions of VOC from this emissions unit shall not exceed 15.9 tons per year, based upon a rolling, 12-month summation of the VOC emissions. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of VOC (Tons)
1	1.59
1-2	3.18
1-3	4.77
1-4	6.36
1-5	7.95
1-6	9.54
1-7	11.13
1-8	12.72
1-9	14.31

1-10	15.9
1-11	15.9
1-12	15.9

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual emission limitation for VOCshall be based upon a rolling, 12-month summation of the VOC emissions.

f. This emissions unit, P007, will replace existing emissions unit P002 (Curing Oven #1). Upon startup of emissions unit P007, the permittee shall immediately shutdown emissions unit P002 and submit the necessary shutdown notification via the eBusiness Center Air Services.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the emissions unit's production rate, in tons/month;

b. the emissions unit's natural gas usage rate, in mmcf/month;

c. the VOCemission rate for each month of operation, in tons; and

d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the VOC emissions, in tons.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative VOC emissions for each calendar month, in tons.

(2) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the combustion temperature on continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable temperature setting shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate temperature range is established to demonstrate compliance. These records shall be maintained at the facility for a period of no less than 3 years.

(3) In order to maintain compliance with the applicable limitation(s) contained in this permit, the acceptable combustion temperature within the thermal oxidizer, during any period of time when the emissions unit controlled by the thermal oxidizer is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance. Until compliance testing has been conducted, the thermal oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

(4) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit 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/limit 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 temperature 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 temperature range/limit 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

temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/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.

(5) The federally enforceable permit-to-install and operate (FEPTIO) application for this emissions unit, P007, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4\ TLV/XY = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: phenol

TLV (mg/m3): 19.21

Maximum Hourly Emission Rate (lbs/hr): 0.48

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 18.7

MAGLC (ug/m3): 457.3

The permittee, has demonstrated that emissions of phenol from emissions unit P007 is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(6) Prior to making any physical changes to or changes in the method of operation of the emissions unit that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit or the materials applied.

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 VOC and, for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels;

ii. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration; and

iii. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the thermal oxidizer;

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 identify in the annual PER the following information concerning the operation of the thermal oxidizer during the 12-month reporting period for this emissions unit:

a. each period of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;

b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted.

d. each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s).

(5) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual PER. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

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 Limitations:

PE shall not exceed 0.09 ton PE per month averaged over a 12-month rolling period.

PM_{10} shall not exceed 0.05 ton PM_{10} per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The limitations above represent the maximum potential uncontrolled emission rates of this emissions unit. The potential PE and PM_{10} emission rates are based on the following equations from the permittee-supplied information in the application:

PE = [(1.08 tons per hour max production rate for the oven) x (0.20 lb PE per ton emission factor, WebFIRE, SCC 30500504)] + [(0.009 mmcf/hr maximum natural gas usage for oven and oxidizer) x (1.9 lbs PE/mmcf emission factor; AP-42 Table 1.4-2, dtd. 7/98)] x (8760 hrs/yr) / (2000 lbs/ton) / 12 months/yr = 0.09 ton per month.

PM_{10} = [(1.08 tons per hour max production rate for the oven) x (0.10 lb PM_{10} per ton emission factor, WebFIRE, SCC 30500504)] + [(0.009 mmcf/hr maximum natural gas usage for oven and oxidizer) x (1.9 lbs PM_{10}/mmcf emission factor; AP-42 Table 1.4-2, dtd. 7/98)] x (8760 hrs/yr) / (2000 lbs/ton) / 12 months/yr = 0.05 ton per month.

b. Emission Limitation:

NOx emissions shall not exceed 0.39 ton NOx per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The limitation above represents the maximum potential uncontrolled emission rate of this emissions unit. The potential NOx emission rate is based on the following equation from the permittee-supplied information in the application:

NOx = [(1.08 tons per hour max production rate for the oven) x (0.16 lbNOx per ton emission factor, WebFIRE, SCC 30500504)] + [(0.009 mmcf/hr maximum natural gas usage for oven and oxidizer) x (100 lbsNOx/mmcf emission factor; AP-42 Table 1.4-1, dtd. 7/98)] x (8760 hrs/yr) / (2000 lbs/ton) / 12 months/yr = 0.39 ton per month.

c. Emission Limitation:

CO emissions shall not exceed 0.27 ton CO per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The limitation above represents the maximum potential uncontrolled emission rate of this emissions unit. The potential CO emission rate is based on the following equation from the permittee-supplied information in the application:

CO = [(0.009 mmcf/hr maximum natural gas usage for oven and oxidizer) x (84 lbs CO/mmcf emission factor; AP-42 Table 1.4-1, dtd. 7/98)] x (8760 hrs/yr) / (2000 lbs/ton) / 12 months/yr = 0.27 ton per month.

d. Emission Limitation:

SO_2 emissions shall not exceed 0.002 ton SO_2 per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The limitation above represents the maximum potential uncontrolled emission rate of this emissions unit. The potential SO_2 emission rate is based on the following equation from the permittee-supplied information in the application:

SO_2 = [(0.009 mmcf/hr maximum natural gas usage for oven and oxidizer) x (0.6 lb SO_2/mmcf emission factor; AP-42 Table 1.4-1, dtd. 7/98)] x (8760 hrs/yr) / (2000 lbs/ton) / 12 months/yr = 0.002 ton per month.

e. Emission Limitation:

VOC emissions shall not exceed 15.9 TPY, based upon a rolling 12-month summation.

Applicable Compliance Method:

Compliance with the VOC emission limitation shall be determined by the record keeping requirements specified in d)(1). The VOC emission rate is calculated with the following equation from the permittee-supplied information in the application, using the information collected in d)(1) and results of the control device performance testing required in f)(2):

VOC = [(actual production rate in tons per month) x (65.27 lbs VOC per ton emission factor, permittee-supplied) x (1 – the control efficiency of the thermal oxidizer) / (2000 lbs/ton)] + [(actual natural gas usage in mmcf per month) x (11 lbs total OC/mmcf emission factor, AP-42 Table 1.4-2, dtd. 7/98) / (2000 lbs/ton)]. All OC is assumed to be VOC.

f. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

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

g. Emission Limitation:

PE shall not exceed 4.32 pounds per hour.

Applicable Compliance Method:

The emission limitation above represents the rule allowable limitation pursuant to Table I of OAC rule 3745-17-11(B) at the maximum production rate of 2,160 lbs/hour for this emissions unit. Figure II of OAC rule 3745-17-11 does not apply because the uncontrolled mass rate of emission is less than 10 lbs/hour.

The emission limitation above is less than the maximum potential uncontrolled emission rate of this emissions unit. The potential PE rate is based on the following equation from the permittee-supplied information in the application:

PE = [(1.08 tons per hour max production rate for the oven) x (0.20 lb PE per ton emission factor, WebFIRE, SCC 30500504)] + [(0.009 mmcf/hr maximum natural gas usage for oven and oxidizer) x (1.9 lbs PE/mmcf emission factor; AP-42 Table 1.4-2, dtd. 7/98)] = 0.23 pound per hour.

(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 3 months after start-up of this emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the control efficiency limitation for VOC emissions.

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

Method 25 or 25A, 40 CFR Part 60, Appendix A.

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

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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.