John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

1/16/2013

Certified Mail

Mr. Douglas Trenkamp
Owens-Brockway Glass Container
One Michael Owens Way, Four O-I Plaza
Perrysburg, OH 43551-2999

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0387042005
Permit Number: P0112412
Permit Type: OAC Chapter 3745-31 Modification
County: Wood

Dear Permit Holder:

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

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

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

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

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA-NWDO

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
Owens-Brockway Glass Container

Facility ID:	0387042005
Permit Number:	P0112412
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	1/16/2013
Effective:	1/16/2013
Expiration:	6/29/2022

Division of Air Pollution Control
Permit-to-Install and Operate
for
Owens-Brockway Glass Container

Table of Contents

Authorization 1

A. Standard Terms and Conditions 3

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

B. Facility-Wide Terms and Conditions 8

C. Emissions Unit Terms and Conditions 10

1. B001, B001 11
2. P001, P001 17
3. P003, P003 23

Authorization

Facility ID:	0387042005
Application Number(s):	A0046462
Permit Number:	P0112412
Permit Description:	Chapter 31 modification to soda-lime glass manufacturing facility comprised of raw material receiving, processing, storage and conveying equipment, one mini-melting furnace, container forming machines, lehrs and hot end and cold end surface treatment. This is a research & development pilot plant used to validate prototype equipment, processes, and theories.
Permit Type:	OAC Chapter 3745-31 Modification
Permit Fee:	$500.00
Issue Date:	1/16/2013
Effective Date:	1/16/2013
Expiration Date:	6/29/2022

Permit Evaluation Report (PER) Annual Date: July 1 - June 30, Due Aug 15

This document constitutes issuance to:

Owens-Brockway Glass Container
One Michael Owens Way, Five O-I Plaza
Perrysburg, OH 43551-2999

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

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

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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: P0112412
Permit Description: Chapter 31 modification to soda-lime glass manufacturing facility comprised of raw material receiving, processing, storage and conveying equipment, one mini-melting furnace, container forming machines, lehrs and hot end and cold end surface treatment. This is a research & development pilot plant used to validate prototype equipment, processes, and theories.

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

Emissions Unit ID:	**B001**
Company Equipment ID:	B001
Superseded Permit Number:	P0109992
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P001**
Company Equipment ID:	P001
Superseded Permit Number:	P0109992
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P003**
Company Equipment ID:	P003
Superseded Permit Number:	P0109992
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 takenby 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, Northwest 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.

C. Emissions Unit Terms and Conditions

1. B001, B001

Operations, Property and/or Equipment Description:

Mini-Melter Furnace (3.8 MMBtu/hr)

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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), as effective 11/30/01	6.6 pounds of carbon monoxide (CO) per day and 1.20 tons of CO per year 6.6 pounds of volatile organic compounds (VOC) per day and 1.20 tons of VOC per year Visible particulate emissions (PE) shall not exceed 20% opacity as a six-minute average See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	ORC 3704.03(T)	204.6 pounds of nitrogen oxide (NO_x) per day 60.06 pounds of particulate matter 10 microns or less in size (PM_{10}) per day

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		112.2 pounds of sulfur dioxide (SO_2) per day See b)(2)c. and b)(2)d.
d.	OAC rule 3745-17-07(A)	See b)(2)e.
e.	OAC rule 3745-17-11(B)	See b)(2)f.
f.	40 CFR Part 60 Subpart CC	See b)(2)g.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant 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 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by US EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the US 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 US EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits no longer apply.

b. This rule paragraph applies once US 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 CO and VOC from this air contaminant source since the uncontrolled potential to emit (PTE) for each is less than ten tons per year. Potential emissions from this unit are associated with the process operating daily.

c. All PE are assumed to be PM_{10}.

d. This air contaminant source has the potential to emit* of ten or more tons per year of NO_x, PM_{10} and SO_2, and as such, shall meet the requirements of ORC 3704.03(T). The Best Available Technology (BAT) requirements under ORC 3704.03(T) have been determined to be compliance with the emission limitations established in b)(1)c.

* The annual potential to emit for NO_x is 37.34 tons per year based on a maximum daily emission rate of 204.6 pounds per day and a maximum operating schedule of 365 days per year. The annual potential to emit for PM_{10} is 10.96 tons per year based on a maximum daily emission rate of 60.06 pounds per day and a maximum operating schedule of 365 days per year. The annual potential to emit for SO_2 is 20.48 tons per year based on a maximum daily emission rate of 112.2 pounds per day and a maximum operating schedule of 365 days per year.

e. The visible PE limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

f. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to ORC 3704.03(T).

g. This facility, including this emission unit, is subject to the provisions of 40 CFR Part 60 Subpart CC. There are no particulate standard requirements applicable to the facility per 40 CFR 60.292(d) because an experimental furnace is not subject to the requirements of this section.

h. The daily and annual emission limitations represent the PTE for this emissions unit. Therefore no monitoring, recordkeeping or reporting requirements are necessary to ensure compliance with these emission limitations.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

(2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in d)(1) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there are no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

f) Testing Requirements

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

a. Emission Limitation:
60.06 pounds PM_{10} per day

Applicable Compliance Method:
Compliance with the pounds per day limitation shall be determined by multiplying an emission factor of 1.4 lbs PM_{10}/ton of raw material [AP-42 Chapter 11.15 (10/1986)], raw material handling of 33 tons/day and a safety factor of 130%. If required, compliance with the lbs/day limitation shall be determined in accordance with the test methods and procedures in Methods 1-4 of 40 CFR, Part 60, Appendix A and Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M.

b. Emission Limitation:
204.6 pounds NO_x per day

Applicable Compliance Method:
Compliance with the pounds per day limitation shall be determined by multiplying an emission factor of 6.2 lbsNO_x/ton of raw material [AP-42 Chapter 11.15 (10/1986)] and a raw material handling of 33 tons/day. If required, compliance with the lbs/day limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7.

c. Emission Limitation:
112.2 pounds SO_2 per day

Applicable Compliance Method:
Compliance with the pound per day limitation shall be determined by multiplying an emission factor of 3.4 lbs SO_2/ton of raw material [AP-42 Chapter 11.15 (10/1986)] and a raw material handling of 33 tons/day. If required, compliance with the lbs/day limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 6.

d. Emission Limitation:
6.6 pounds CO per day, 1.2 tons CO per year

Applicable Compliance Method:
Compliance with the pound per day limitation shall be determined by multiplying an emission factor of 0.2 lb CO/ton of raw material [AP-42 Chapter 11.15 (10/1986)] and a raw material handling of 33 tons/day. If required, compliance with the lbs/day limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

The tons/yr limitation was developed by multiplying the lbs/day limitation by a maximum operating schedule of 365 days/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the daily limitation, compliance with the annual limitation shall also be demonstrated.

e. Emission Limitation:
6.6 pounds VOC per day, 1.2 tons VOC per year

Applicable Compliance Method:
Compliance with the pound per day limitation shall be determined by multiplying an emission factor of 0.2 lb VOC/ton of raw material [AP-42 Chapter 11.15 (10/1986)] and a raw material handling of 33 tons/day. If required, compliance with the lbs/day limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 18, 25 and/or 25A.

The tons/yr limitation was developed by multiplying the lbs/day limitation by a maximum operating schedule of 365 days/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the daily limitation, compliance with the annual limitation shall also be demonstrated.

f. Emission Limitation:
Visible particulate emissions from this emissions unit shall not exceed 20 percent opacity as a six-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

2. P001, P001

Operations, Property and/or Equipment Description:

Batch Material Storage and Handling

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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(F)	<u>Unloading of raw materials:</u> 0.62 pound particulate matter 10 microns or less in size (PM_{10}) per day and 0.11 ton PM_{10} per year <u>Transfer points:</u> 1.03 pounds PM_{10} per day and 0.19 ton PM_{10} per year <u>Primary crushing operations:</u> 0.31 pound PM_{10} per day and 0.06 ton PM_{10} per year Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average. See b)(2)a., b)(2)d. and c)(1)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)c.
d.	OAC rule 3745-17-07(A)	See b)(2)e.
e.	OAC rule 3745-17-11(B)	See b)(2)f.

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for the purpose of limiting potential to emit (PTE) to avoid Title V requirements. The legally and practically enforceable emission limitations are based on the operational restrictions contained in c)(1):

i. 0.62 lb PM_{10} per day and 0.11 ton PM_{10} per year from unloading of raw materials;

ii. 1.03 lbs PM_{10} per day and 0.19 ton PM_{10} per year from transfer points;

iii. 0.31 lb PM_{10} per day and 0.06 ton PM_{10} per year from primary crushing operations; and

iv. Visible PE shall not exceed 20% opacity, as a six-minute average.

b. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01 have been determined to be compliance with the voluntary restrictions established in accordance with OAC rule 3745-31-05(F).

It should be noted that the voluntary restrictions were also established with the intentional purpose of avoiding BAT requirements under OAC rule 3745-31-05(A)(3), as effective 12/01/06.

The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 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 ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than 10 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 revision 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 limits and 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 Best Available Technology (BAT) requirements under OAC rule 3745-31-05 (A)(3)(a) do not apply to the emissions of PM_{10} since the potential to emit is less than 10 tons per year, taking into account the legally and practically enforceable voluntary restrictions established under OAC rule 3745-31-05(F) in this permit.

d. All PE are assumed to be PM_{10}.

e. The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(F).

f. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).

g. The daily and annual emission limitations represent the PTE for this emissions unit. Therefore no monitoring, recordkeeping or reporting requirements are necessary to ensure compliance with these emission limitations.

c) Operational Restrictions

(1) The following operational restriction has been included in this permit for the purpose of establishing legally and practically enforceable requirements which limit PTE [See b)(2)a.]:

a. the use of baghouses achieving a 97% control efficiency on the unloading of raw materials operations as well as the primary crushing operations; and

b. the use of a filtration system achieving a 95% control efficiency on the conveyor transfer point operations.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

(2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in d)(1) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there are no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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. <u>Emission Limitation:</u>

0.62 lb PM_{10} per day and 0.11 ton PM_{10} per year from unloading of raw materials

<u>Applicable Compliance Method:</u>

Compliance with the pounds per day limitation shall be determined by multiplying the maximum throughput of 43.7 tons per day with the AP-42 emission factor for PM_{10} of 0.47 lb/ton of material [Table 11.12-2 (revised 6/2006)] and applying a control efficiency of 97% for the dust collectors. If required, compliance with the PM_{10} hourly emissions limitation shall be determined in accordance with the test methods and procedures in Methods 1-4 of 40 CFR, Part 60, Appendix A and Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M.

The ton/yr limitation was developed by multiplying the lb/day limitation by a maximum operating schedule of 365 days/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the daily limitation, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

1.03 lbs PM_{10} per day, 0.19 ton PM_{10} per year from six transfer points

Applicable Compliance Method:

Compliance with the pounds per day limitation shall be determined by multiplying the maximum throughput of 43.7 tons per day with the AP-42 emission factor for PM_{10} of 0.47 lb/ton of material [Table 11.12-2 (revised 6/2006)] and applying a control efficiency of 95% for the filtration system. If required, compliance with the PM_{10} hourly emissions limitation shall be determined in accordance with the test methods and procedures in Methods 1-4 of 40 CFR, Part 60, Appendix A and Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M.

The ton/yr limitation was developed by multiplying the lb/day limitation by a maximum operating schedule of 365 days/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the daily limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitation:

0.31 lb PM_{10} per day, 0.06 ton PM_{10} per year from crushing operations

Applicable Compliance Method:

Compliance with the pounds per day limitation shall be determined by multiplying the maximum throughput of 39.3 tons per day with the AP-42 emission factor for PM_{10} of 0.26 lb/ton of material [PM emission factor taken from http://www.michigan.gov/documents/deq/deq-aqd-air-eval-era-EmissionCalculation-mineralproductprocesses_324070_7.pdf] and applying a control efficiency of 97% for the dust collectors. If required, compliance with the PM_{10} hourly emissions limitation shall be determined in accordance with the test methods and procedures in Methods 1-4 of 40 CFR, Part 60, Appendix A and Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M.

The ton/yr limitation was developed by multiplying the lb/day limitation by a maximum operating schedule of 365 days/year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the daily limitation, compliance with the annual limitation shall also be demonstrated.

d. Emission Limitation:

Visible PE from this emissions unit shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

3. P003, P003

Operations, Property and/or Equipment Description:

Hot End Surface Treatment

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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), as effective 11/30/01	1.39 pounds particulate matter 10 microns or less in size (PM_{10}) per hour and 6.09 tons PM_{10} per year Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average. 0.04 pound of volatile organic compounds (VOC) per hour and 0.18 ton of VOC per year See b)(2)a. and b)(2)c.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	OAC rule 3745-17-07(A)	See b)(2)d.
d.	OAC rule 3745-17-11(B)	See b)(2)e.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant 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 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by US EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the US 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 US EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits no longer apply.

b. This rule paragraph applies once US 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 PM_{10} and VOC from this air contaminant source since the uncontrolled potential to emit (PTE) for each is less than ten tons per year. Potential emissions from this unit are associated with the process operating daily.

c. All particulate emissions (PE) are assumed to be PM_{10}.

d. The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

f. The daily and annual emission limitations represent the PTE for this emissions unit. Therefore no monitoring, recordkeeping or reporting requirements are necessary to ensure compliance with these emission limitations.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

e) Reporting Requirements

(1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

(2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in d)(1) above:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

The above information shall be provided as an attachment to the PER. If there are no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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. <u>Emission Limitation:</u>

1.39 lbs PM_{10}/hour and 6.09 tons PM_{10}/year

<u>Applicable Compliance Method:</u>

Compliance with the pounds per hour limitation shall be determined by multiplying the emission factor established from a stack test of a similar source of 1.54 lbsPM_{10} per lbmonobutylintrichloride (MBTT) by the maximum application of 0.90 lb MBTT per hour. If required, compliance with the PM_{10} hourly emissions limitation shall be determined in accordance with the test methods and procedures in Methods 1-4 of 40 CFR, Part 60, Appendix A and Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M.

The ton/yr limitation was established by multiplying the hourly limitation with 8760 hours per year and dividing by a conversion factor of 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual limitation shall be also be demonstrated.

b. Emission Limitation:

0.02 lb VOC/hour and 0.09 ton VOC/year

Applicable Compliance Method:

Compliance with the pounds per hour limitation shall be determined by multiplying the emission factor established from a stack test of a similar source of 0.045 lbs VOC per lb MBTT by the maximum application of 0.90 lb MBTT per hour. If required, compliance with the lbs/hour limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 18, 25 and/or 25A.

The ton/yr limitation was established by multiplying the hourly limitation with 8760 hours per year and dividing by a conversion factor of 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual limitation shall be also be demonstrated.

c. Emission Limitation:

Visible PE shall not exceed 20 percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.