



Environmental Protection Agency

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

6/29/2012

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
Facility ID: 0387042005  
Permit Number: P0109992  
Permit Type: Initial Installation  
County: Wood

Certified Mail

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

Dear Permit Holder:

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

The issuance of this PTI 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  
309 South Fourth Street, Room 222  
Columbus, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc), by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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:	P0109992
Permit Type:	Initial Installation
Issued:	6/29/2012
Effective:	6/29/2012
Expiration:	6/29/2022





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

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## Authorization

Facility ID: 0387042005

Application Number(s): A0044444

Permit Number: P0109992

Permit Description: Soda-lime glass manufacturing facility that will be 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: Initial Installation

Permit Fee: \$600.00

Issue Date: 6/29/2012

Effective Date: 6/29/2012

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, Three O-I Plaza  
Perrysburg, OH 43551-2999

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

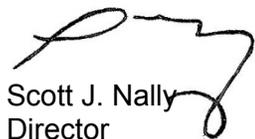
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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: P0109992

Permit Description: Soda-lime glass manufacturing facility that will be 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:

<b>Emissions Unit ID:</b>	<b>B001</b>
Company Equipment ID:	B001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>B002</b>
Company Equipment ID:	B002
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P001</b>
Company Equipment ID:	P001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P003</b>
Company Equipment ID:	P003
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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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

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

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

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

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

**7. What reports must I submit under this permit?**

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

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

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

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

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, 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<sup>1</sup> 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.

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<sup>1</sup>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	<p>27.3 pounds of particulate matter 10 microns or less in size (PM<sub>10</sub>) per day and 4.98 tons PM<sub>10</sub> per year</p> <p>Visible particulate emissions (PE) shall not exceed 20% opacity as a six-minute average</p> <p>51 pounds of sulfur dioxide (SO<sub>2</sub>) per day and 9.31 tons of SO<sub>2</sub> per year</p> <p>3 pounds of carbon monoxide (CO) per day and 0.55 ton of CO per year</p> <p>3 pounds of volatile organic compounds (VOC) per day and 0.55 ton of VOC per year</p> <p>See b)(2)a. and b)(2)c.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	ORC 3704.03(T)	93 pounds of nitrogen oxide (NO <sub>x</sub> ) per day
d.	OAC rule 3745-17-07(A)	See b)(2)d.
e.	OAC rule 3745-17-11(B)	See b)(2)e.
f.	40 CFR Part 60 Subpart CC	See b)(2)f.

(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<sub>10</sub>, CO, SO<sub>2</sub> 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<sub>10</sub>.
- d. 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).
- 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. 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.



## 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:  
27.3 lbs PM<sub>10</sub>/day, 4.98 tons PM<sub>10</sub>/year

Applicable Compliance Method:

Compliance with the pounds per day limitation shall be determined by multiplying an emission factor of 1.4 lbs PM<sub>10</sub>/ton of raw material [AP-42 Chapter 11.15 (10/1986)], raw material handling of 15 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.

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.

- b. Emission Limitation:  
93 pounds NO<sub>x</sub> per day

Applicable Compliance Method:

Compliance with the pounds per day limitation shall be determined by multiplying an emission factor of 6.2 lbsNO<sub>x</sub>/ton of raw material [AP-42 Chapter 11.15 (10/1986)] and a raw material handling of 15 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:  
51 lbs SO<sub>2</sub>/day, 9.31 tons SO<sub>2</sub>/year

Applicable Compliance Method:

Compliance with the pound per day limitation shall be determined by multiplying an emission factor of 3.4 lbs SO<sub>2</sub>/ton of raw material [AP-42 Chapter 11.15 (10/1986)] and a raw material handling of 15 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.

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.

- d. Emission Limitation:  
3 lbs CO/day, 0.55 ton CO/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 15 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 ton/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:  
3 lbs VOC/day, 0.55 ton VOC/year

Applicable Compliance Method:

Compliance with the pound per day limitation shall be determined by multiplying an emission factor of 0.2 lb OC/ton of raw material [AP-42 Chapter 11.15 (10/1986)] and a raw material handling of 15 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 ton/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. B002, B002

Operations, Property and/or Equipment Description:

1 MW Emergency Generator

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.	40 CFR Part 60, Subpart IIII 40 CFR 60.4205(b) 40 CFR 60.4202(a)(2) 40 CFR 89.112, Table 1, Tier 2	6.4 grams of nonmethane hydrocarbon (NMHC) + nitrogen oxide (NO <sub>x</sub> ) per kilowatt-hour  3.5 grams of carbon monoxide (CO) per kilowatt-hour  0.2 gram of particulate matter (PM) per kilowatt-hour  See b)(2)a. and b)(2)b.
b.	40 CFR 60.4207(b) 40 CFR 80.510(b)	Beginning 10/01/10, the sulfur content of the diesel fuel burned in this emissions unit shall not exceed 15 ppm per gallon of oil or 0.0015% sulfur by weight.  See b)(2)c.

c.	40 CFR 89.113	20% opacity during the acceleration mode  15% opacity during the lugging mode  50% opacity during the peaks in either the acceleration or lugging modes.
d.	OAC rule 3745-31-05(F)	0.11 ton particulate matter 10 microns or less in size (PM <sub>10</sub> ) per year  Visible particulate emissions (PE) shall not exceed 20% opacity as a six-minute average  3.53 tons NMHC + NO <sub>x</sub> per year  1.92 tons of CO per year  See b)(2)d.
e.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)e. and b)(2)f.
f.	OAC rule 3745-31-05(A)(3)(a)(ii) , as effective 12/01/06	See b)(2)g.
g.	OAC rule 3745-17-07(A)	See b)(2)h.
h.	OAC rule 3745-17-11(B)(5)(b)	See b)(2)i.
i.	OAC rule 3745-18-06	See b)(2)j.
j.	OAC rule 3745-110-03	See b)(2)k.
k.	40 CFR 63 Subpart ZZZZ  40 CFR 63.6590(c)	A new area source operating in compliance with 40 CFR Part 60 Subpart IIII is the demonstration of compliance with 40 CFR Part 63 Subpart ZZZZ.

(2) Additional Terms and Conditions

- a. The stationary compression ignition (CI) internal combustion engine (ICE) is subject to and shall be operated in compliance with 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion. The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart IIII. The permittee shall also comply with all applicable requirements of 40 CFR Part 60, Subpart A (General Provisions) as identified in Table 8 of 40 CFR Part 60, Subpart IIII.

[40 CFR 60.4201(a)(2)]

- b. The stationary CI ICE has been or shall be purchased certified by the manufacturer to emission standards as stringent as those identified in 40 CFR 60.4202(a) and found in Tier 2 of 40 CFR 89.112, Table 1, for engines greater than 560 kW and to the opacity standards found in 40 CFR 89.113.

[40 CFR 60.4205(b)], [40 CFR 60.4202(a)], [40 CFR 60.4203], and [40 CFR 60.4211(c)]

- c. The quality of the diesel fuel burned in this emissions unit shall meet the following specifications on an "as received" basis:

- i. Beginning on and after October 1, 2010, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.0015 pound sulfur dioxide (SO<sub>2</sub>)/MMBtu actual heat input (15 ppm sulfur per gallon of oil or 0.0015% sulfur by weight);
- ii. A cetane index of 40 or an aromatic content of 35 volume percent; and
- iii. Greater than 135,000 Btu/gallon of oil.

Compliance with the above-mentioned specifications shall be determined by using the analytical results provided by the permittee or oil supplier for each shipment of oil.

[40 CFR 60.4207] and [40 CFR 80.510(a) and (b)]

- d. 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 40 CFR, Part 60, Subpart IIII emission limitations the operational restriction contained in c)(1):

- i. 0.11 ton PM10 per year;
- ii. 3.53 tons NHMC + NO<sub>x</sub> per year;
- iii. 1.92 tons CO per year; and
- iv. Visible PE shall not exceed 20% opacity, as a six-minute average.

It should be noted that this emission unit also emits volatile organic compounds (VOC) and sulfur dioxide (SO<sub>2</sub>), but the emissions of these pollutants are negligible and will not be included in this permit.

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

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.

It should be noted that the requirements established pursuant to OAC rule 3745-31-05(F) will remain applicable after the above SIP revisions are approved by U.S. EPA.

- f. All PE are assumed to be PM<sub>10</sub>.
- g. 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 VOC, SO<sub>2</sub>, CO, NO<sub>x</sub> and PM<sub>10</sub> 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.

- h. 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) and 40 CFR 89.113.
- i. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR, Part 60, Subpart IIII and OAC rule 3745-31-05(F).
- j. This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).
- k. This emissions unit is exempt from the requirements of OAC rule 3745-110-03 pursuant to OAC rule 3745-110-03(J)(2).

c) Operational Restrictions

- (1) The maximum annual hours of operation for this emissions unit shall not exceed 500 hours.
- (2) The permittee shall combust only diesel fuel that meets the per gallon standards of 40 CFR 80.510.
- (3) The stationary CI ICE shall be installed, operated, and maintained according to the manufacturer's specifications, written instructions, and procedures, and/or according to procedures developed by the permittee that have been approved by the engine

manufacturer in writing, over the entire life of the engine. The permittee shall operate and maintain the stationary CI ICE to achieve the Tier 2 emission standards in Table 1 to 40 CFR 89.112, as required per 40 CFR 60.4205(b).

[40 CFR 60.4206] and [40 CFR 60.4211(a)]

d) Monitoring and/or Recordkeeping Requirements

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements which limit PTE [see b)(2)d.):

a. The permittee shall maintain monthly records of the hours of operation of the diesel generator (in hours per month and total hours, to date for the calendar year).

(2) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of the diesel oil received and the oil supplier's (or permittee's) analyses for sulfur content, in parts per million per-gallon (40 CFR 80.510) or percent by weight. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR 80.580, using the appropriate ASTM methods. These records shall be retained for a minimum of 5 years and shall be available for inspection by the Director or his/her representative.

[40 CFR 60.4207(a) and (b)]

(3) The permittee shall maintain the manufacturer's certification, to the applicable Tier 2 emission standards in Table 1 of 40 CFR 89.112, on site or at a central location for all facility ICE and it shall be made available for review upon request. If the manufacturer's certification is not kept on site, the permittee shall maintain a log for the location of each ICE and it shall identify the agency-assigned emissions unit number, the manufacturer's identification number, and the identification number of the certificate. The manufacturer's operations manual and any written instructions or procedures developed by the permittee and approved by the manufacturer shall be maintained at the same location as the ICE.

[40 CFR 60.4211(c)]

(4) If the stationary CI ICE is an emergency stationary ICE, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

[40 CFR 60.4214(b)]

(5) 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 emissions incident; and
- e. any corrective actions taken to 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)(6) 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.

- (3) The permittee shall identify in the annual permit evaluation report any period of time (date and number of hours) that the quality of oil burned in this emissions unit did not meet the requirements established in 40 CFR 80.510, based upon the required fuel records; and the amount of non-compliant fuel burned on each such occasion.

For [40 CFR 60.4207] and [40 CFR 80.510(a) and (b)]

- (4) Pursuant to the general provisions of NSPS, the source owner/operator is hereby advised to the requirement to report the following at the appropriate times for this emissions unit:

- a. Construction date (no later than 30 days after such date);
- b. Actual start-up date (within 15 days after such date); and
- c. Date of performance testing (if required, at least 30 days prior to testing).

The reporting requirements indicated in this section shall be initiated by the first instance when this emissions unit operates as an affected facility at a glass manufacturing plant as specified in 40 CFR 60.290(a).

Reports shall be sent to:

Ohio EPA, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, Ohio 43402

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:  
6.4 grams of NMHC + NO<sub>x</sub> per kW-hr  
3.53 tons NMHC + NO<sub>x</sub> per year

Applicable Compliance Method:

Compliance with the g/kW-hr emission limitation shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limit is the emission limitation from Table 1 of 40 CFR 89.112, the Tier 2 exhaust emission standards for diesel engines greater than 560 kilowatts (750 horsepower). If required, compliance with the g/kW-hr limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7.

For the purpose of reporting emissions, where the limit is for NMHC + NO<sub>x</sub>, the NO<sub>x</sub> and VOC limits shall be calculated using a ratio of 81.6% NO<sub>x</sub> to 18.4% VOC.\*

$$6.4 \text{ g NMHC+NO}_x/\text{kW-hr} \times 81.6\% \text{ NO}_x^* = 5.22 \text{ grams NO}_x/\text{kW-hr}$$

The ton per year limitation was developed by multiplying the gram/kW-hr limitation by the maximum output capacity of 1,000 kW, a conversion factor of 0.0022 lb/gram and a maximum operating schedule of 500 hours per year, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hours of operation restriction, compliance with the annual emission limitation shall also be demonstrated.

- b. Emission Limitation:  
3.5 grams of CO per kW-hr  
1.92 tons of CO per year

Applicable Compliance Method:

Compliance with the g/kW-hr emission limitation shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limit is the emission limitation from Table 1 of 40 CFR 89.112, the Tier 2 exhaust emission standards for diesel engines greater than 560 kilowatts (750 horsepower). If required, compliance with the g/kW-hr limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 10.

The ton per year limitation was developed by multiplying the gram/kW-hr limitation by the maximum output capacity of 1,000 kW, a conversion factor of 0.0022 lb/gram and a maximum operating schedule of 500 hours per year, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hours of operation restriction, compliance with the annual emission limitation shall also be demonstrated.

- c. Emission Limitation:  
0.2 gram of particulate matter per kW-hour  
0.11 ton PM per year

Applicable Compliance Method:

Compliance with the g/kW-hr emission limitation shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limit is the emission limitation from Table 1 of 40 CFR 89.112, the Tier 2 exhaust emission standards for diesel engines greater than 560 kilowatts (750 horsepower). If required, compliance with the g/kW-hour limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 5.

The ton per year limitation was developed by multiplying the gram/kW-hr limitation by the maximum output capacity of 1,000 kW, a conversion factor of 0.0022 lb/gram and a maximum operating schedule of 500 hours per year, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hours of operation restriction, compliance with the annual emission limitation shall also be demonstrated.

- d. Emission Limitation:  
20% opacity during the acceleration mode  
15% opacity during the lugging mode  
50% opacity during the peaks in either the acceleration or lugging modes

Applicable Compliance Method:

The ICE was purchased certified to the opacity standards of 40 CFR 89.113. [40 CFR 60.4205(b)], [40 CFR 60.4202(a)], and [40 CFR 89.113]

e. Emission Limitation:

Visible PE shall not exceed 20% opacity as a 6-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.

(2) The permittee shall comply with the testing requirements referenced in 40 CFR 60.4213. The performance testing shall be conducted using one of the following test methods or procedures:

- a. in accordance with 40 CFR 60.4212, conduct the exhaust emissions testing using the in-use testing procedures found in 40 CFR Part 1039, Subpart F, measuring the emissions of the regulated pollutants as specified in 40 CFR 1065; or
- b. in accordance with 40 CFR 60.4213, conduct exhaust emissions testing using the test methods identified in Table 7 to Subpart IIII of Part 60.

If demonstrating compliance through the in-use testing procedures in 40 CFR Part 1039, Subpart F, exhaust emissions from the stationary CI ICE shall not exceed the "not to exceed" (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112, determined from the following equation:

$$\text{NTE requirement for each pollutant} = 1.25 \times \text{STD}$$

Where:

STD = The standard specified for the pollutant in 40 CFR 89.112.

g) Miscellaneous Requirements

(1) None.



3. 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(A)(3), as effective 11/30/01	<u>Unloading of raw materials:</u> 0.09 pound particulate matter 10 microns or less in size (PM <sub>10</sub> ) per hour and 0.39 ton PM <sub>10</sub> per year  <u>Six transfer points:</u> 0.04 pound PM <sub>10</sub> per hour and 0.19 ton PM <sub>10</sub> per year  Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average.  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<sub>10</sub> from this air contaminant source since the uncontrolled potential to emit (PTE) 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<sub>10</sub>.

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. Emission Limitation:  
0.09 lb PM<sub>10</sub>/hour, 0.39 ton PM<sub>10</sub>/year from unloading of raw materials  
  
Applicable Compliance Method:  
Compliance with the pounds per hour limitation shall be determined by multiplying the outlet grain loading of 0.01 grains per dry standard cubic foot (gr/dscf) by a maximum volumetric air flow from all of the dust collectors of 1,000 scfm and the appropriate conversion factors of 7000 grains/lb and 60 minutes/hr. If required, compliance with the PM<sub>10</sub> 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:  
0.04 lb PM<sub>10</sub>/hour, 0.19 ton PM<sub>10</sub>/year from six transfer points

Applicable Compliance Method:

Compliance with the pounds per hour limitation shall be determined by multiplying the outlet grain loading of 0.01 grains per dry standard cubic foot (gr/dscf) by a maximum volumetric air flow from the dust collector of 500 scfm and the appropriate conversion factors of 7000 grains/lb and 60 minutes/hr. If required, compliance with the PM<sub>10</sub> 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.

- c. 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.



4. 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	0.62 pound particulate matter 10 microns or less in size (PM <sub>10</sub> ) per hour and 2.72 tons PM <sub>10</sub> per year  Visible PE shall not exceed 20% opacity, as a six-minute average.  0.02 pound of volatile organic compounds (VOC) per hour and 0.09 ton of VOC per  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<sub>10</sub> 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<sub>10</sub>.

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. Emission Limitation:  
0.62 lb PM<sub>10</sub>/hour and 2.72 tons PM<sub>10</sub>/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 1.54 lbsPM<sub>10</sub> per lbmonobutylintrichloride (MBTT) by the maximum application of 0.40 lb MBTT per hour. If required, compliance with the PM<sub>10</sub> 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 0.40 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.