



Environmental Protection Agency

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

5/30/2012

Mr. Mike Palsgrove  
Retterbush Fiberglass Corporation  
719 Long Dr.  
PO Box 207  
Piqua, OH 45356-0207

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

Facility ID: 0855100393  
Permit Number: P0109404  
Permit Type: OAC Chapter 3745-31 Modification  
County: Miami

Certified Mail

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

Dear Permit Holder:

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

Andrew Hall  
Permit Review/Development Section  
Ohio EPA, DAPC  
122 South Front Street  
Columbus, Ohio 43215

and Regional Air Pollution Control Agency  
117 South Main Street  
Dayton, OH 45422-1280

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Regional Air Pollution Control Agency at (937)225-4435.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification  
RAPCA; Indiana





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

Retterbush Injection Molded Fiberglass, Inc. is a reinforced plastic composite manufacturing facility (job shop). This PTI (P0109404) is a modification for emissions units P003, P004, and P005 to limit HAP emissions (styrene) below major source levels. Emissions unit P003 is a hand layup (using rollers and brushes) and spray layup booth (using chopper guns) for the application of styrene resins over fiberglass strands. Emissions unit P004 is used for Resin Transfer Molding (RTM) and Low Pressure Molding Compound (LPMC) processes. Emissions unit P005 is a gel coat booth where clear or colored resin surface coats are applied for cosmetic enhancement or weatherability of a fiberglass laminant.

3. Facility Emissions and Attainment Status:

The facility is located in Miami County which is currently designated as attainment for ozone. The facility's potential to emit is less than 100 tons for criteria pollutants and less than 25 tons per year for combined HAPs. The facility has a potential to emit greater than 10 tons per year of an individual HAP (styrene). Reported annual styrene emissions from Retterbush have been below 10 tons per year since the first emissions unit was installed in 1988. The highest annual styrene emissions level reported was 3.8 tons for calendar year 1998. Retterbush has no air emissions controls and is already operating as a synthetic minor source to avoid Title V operating permit requirements and a synthetic area source under the reinforced plastic composites MACT (subpart WWWW). This PTIO application will substitute the federally enforceable emissions limitations, monitoring, record keeping and reporting requirements of OAC rule 3745-21-25 to the PTIO instead of the production limitations and styrene content limitations that were used in the previous PTIO.

4. Source Emissions:

Retterbush has proposed to use compliance with the federally enforceable VOC emissions limitations of OAC rule 37345-21-25 to maintain HAP emissions below major source levels. Historical production records combined with the with the VOC emissions (virtually all of the VOC emissions are styrene) limitations of OAC rule 3745-21-25 will keep styrene emissions well below the major source threshold of 10 tons per year for individual HAP.

5. Conclusion:

Compliance with VOC emissions limitations of OAC rule 3745-21-25 combined with the record keeping requirements in this permit will ensure that styrene emissions from Retterbush will not exceed 9.9 tons on a rolling 12-month basis. Therefore, Retterbush is not a major source subject to Title V operating permit requirements or the proposed reinforced plastic composites MACT (40 CFR Part 63, Subpart WWWW).

6. Please provide additional notes or comments as necessary:

None

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

<u>Pollutant</u>	<u>Tons Per Year</u>
<u>VOC</u>	<u>14.8</u>
<u>Individual HAP</u>	<u>9.9</u>
<u>Combined HAP</u>	<u>24.9</u>

PUBLIC NOTICE  
5/30/2012 Issuance of Draft Air Pollution Permit-To-Install and Operate

Retterbush Fiberglass Corporation

719 Long Dr,

Piqua, OH 30980

Miami County

FACILITY DESC.: All Other Plastics Product Manufacturing

PERMIT #: P0109404

PERMIT TYPE: OAC Chapter 3745-31 Modification

PERMIT DESC: Chapter 31 modification to allow for an increase in VOC emissions from reinforced plastic composites manufacturing operations.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: Andrew Weisman, Regional Air Pollution Control Agency, 117 South Main Street, Dayton, OH 45422-1280. Ph: (937)225-4435



**Ohio**

**Environmental  
Protection Agency**

**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Retterbush Fiberglass Corporation**

Facility ID:	0855100393
Permit Number:	P0109404
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	5/30/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





Division of Air Pollution Control
Permit-to-Install and Operate
for
Retterbush Fiberglass Corporation

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? ..... 4
3. What records must I keep under this permit? ..... 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? ..... 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? ..... 5
7. What reports must I submit under this permit? ..... 5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? ..... 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? ..... 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? ..... 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? ..... 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? ..... 7
15. What happens if a portion of this permit is determined to be invalid? ..... 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions ..... 11
1. P003, Spray and hand layup ..... 12
2. P004, LPMC and RTM..... 24
3. P005, Gelcoat spray area ..... 29



## Authorization

Facility ID: 0855100393

Application Number(s): A0043348

Permit Number: P0109404

Permit Description: Chapter 31 modification to allow for an increase in VOC emissions from reinforced plastic composites manufacturing operations.

Permit Type: OAC Chapter 3745-31 Modification

Permit Fee: \$0.00 *DO NOT send payment at this time, subject to change before final issuance*

Issue Date: 5/30/2012

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Retterbush Fiberglass Corporation  
719 Long Dr  
Piqua, OH 30980

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:

Regional Air Pollution Control Agency  
117 South Main Street  
Dayton, OH 45422-1280  
(937)225-4435

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: P0109404

Permit Description: Chapter 31 modification to allow for an increase in VOC emissions from reinforced plastic composites manufacturing operations.

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>P003</b>
Company Equipment ID:	Spray and hand layup
Superseded Permit Number:	08-04818
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P004</b>
Company Equipment ID:	LPMC and RTM
Superseded Permit Number:	08-04818
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P005</b>
Company Equipment ID:	Gelcoat spray area
Superseded Permit Number:	08-04818
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 Regional Air Pollution Control Agency in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting<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.
2. The emissions of hazardous air pollutants (HAPs), as defined in Section 112(b) of Title III of the Clean Air Act, from all the emissions units at this facility, shall not exceed 9.9 TPY for any individual HAP, as a rolling, 12-month sum, and 24.9 TPY for any combination of HAPs, as a rolling 12-month sum.
3. The permittee shall keep records for the entire facility each month of the following information:
  - a) The identification of each HAP employed.
  - b) The quantity, in pounds or tons, of each HAP employed.
  - c) The quantity, in pounds or tons, of all the HAPs employed.
  - d) The total facility-wide emissions (and associated calculations) for each individual HAP, in tons, (calculated by the sum of the individual HAP emission rates from all the emissions units at the facility using the equations in table 1 to Subpart WWWW of 40CFR 63 or any HAP emissions factor approved by U.S. EPA).
  - e) The total facility-wide emissions (and associated calculations) for all combined HAPs, in tons, (calculated by summing all combined HAPs emission rates from all the emissions units at the facility using the equations in table 1 to Subpart WWWW of 40CFR 63 or any VOC emissions factor approved by U.S. EPA).
  - f) The rolling 12-month sum of the total individual HAP emissions rates for each HAP from all the emissions units at the facility, in tons, (the sum of individual HAP emissions rates calculated according to 3.d) for the previous 12 months).
  - g) The rolling 12-month sum of the total combined HAP emissions rates from all the emissions units at the facility, in tons, (the sum of combined HAP emissions rates calculated according to 3.e) for the previous 12 months).
4. The permittee shall submit quarterly deviation (excursion) reports, in accordance with Part I of the Standard Terms and Conditions, of this permit, of the following information:
  - a) An identification of each month during which the rolling, 12-month individual HAP emissions rate (from the facility) exceeded 9.9 tons, and the actual rolling, 12-month sum of each individual HAP emissions rate (from the facility) for each such month.

- b) An identification of each month during which the rolling, 12-month combination of all HAP emissions rates (from the facility) exceeded 24.9 tons, and the actual rolling, 12-month sum of the combination of all HAP emissions rates (from the facility) for each such month.

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

The quarterly reports shall be submitted, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency). Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

- 5. The permittee shall submit annual reports that summarize the annual emissions of each individual HAP and the combined emissions of all the HAPs for the facility. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Synthetic Minor Title V Fee Emission Report.

## **C. Emissions Unit Terms and Conditions**



1. P003, Spray and hand layup

Operations, Property and/or Equipment Description:

Resin Spray up and hand lay up booth

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. b)(1)e, (d)(5) and d)(6).

(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	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 1.54 pounds per hour and 6.67 tons per year excluding cleanup materials.  See b)(2)a. and b)(2)b.  Compliance with this rule also includes compliance with the requirements of OAC rule 3745-21-25.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) as effective 12/01/06	See b)(2)c.
c.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63, Subpart WWWW)	See Section B.2. through B.5.



d.	OAC rule 3745-21-25	The VOC emissions from this emissions unit shall not exceed the limitations specified in Table 2 of the rule for open molding operations.  See b)(2)d.
e.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(5).

(2) Additional Terms and Conditions

- a. The permittee shall not use VOC cleanup materials in this emissions unit.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC is less than 10 tons/year
- d. The VOC threshold for this facility calculated according OAC 3745-21-25(F) is less than 100 tons per year. The VOC emissions from resin application in this emissions unit shall not exceed the following:

Type of operation	Resin application method	VOC emissions limit
Open molding: corrosion resistant and/or high strength (CR/HS)	Mechanical resin application	113 pounds/ton applied
	Filament application	171 pounds/ton applied
	Manual resin application	123 pounds/ton applied
Open molding: non-CR/HS	Mechanical resin application	88 pounds/ton applied
	Filament application	188 pounds/ton applied
	Manual resin application	87 pounds/ton applied
Open molding tooling	Mechanical resin application	254 pounds/ton applied
	Manual resin application	157 pounds/ton applied



Table with 3 columns: Resin Type, Application Method, and Amount Applied. Rows include Open molding: low-flame spread/low-smoke products and Open molding: shrinkage controlled resins.

c) Operational Restrictions

- (1) Keep containers that store VOC containing materials closed or covered except during the addition or removal of materials. Bulk VOC-containing materials storage tanks may be vented as necessary for safety.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall record the following information for each month:
a. The company identification of each neat resin (as purchased), catalyst and VOC additives employed;
b. The weight, in tons, of each resin, as applied;
c. The weight, in pounds, of each catalyst employed;
d. The VOC (monomer) concentration of each resin, as applied, in percent by weight\*;
e. The method of application for each resin employed (mechanical, manual or filament application);
f. The VOC emission factor for each resin employed, in pounds VOC per ton of resin employed calculated using the equations in table 1 to Subpart WWWW of 40CFR 63 or any VOC emissions factor approved by U.S. EPA;
g. The VOC emissions, in pounds, d)(1)b. multiplied by d)(1)f. for each resin applied.

Resin use records may be based on purchase records if the permittee can reasonably estimate how the resin is applied. The monomer content records may be based on MSDS or on resin specifications supplied by the resin supplier.

\*This term is intended to be synonymous "neat resin plus" as used in OAC rule 3745-21-25. Neat resin plus means neat resin plus any VOC-containing materials that are added to the resin by the supplier or the facility. Neat resin plus does not include any added filler, reinforcements, catalysts, or promoters. Neat resin plus does include any additions of styrene or methyl methacrylate monomer in any form, including in catalysts and promoters.

(2) The permittee shall use one of the following methods to demonstrate compliance with the VOC emissions limitations of Table 2 of OAC rule 3745-21-25:

a. Demonstrate that an individual resin, as applied, meets the applicable emission limit.

i. Calculate the actual VOC emissions factor for each different process stream within each operation type.

A process stream is defined as each individual combination of resin, application technique, and control technique.

Process streams within operation types are considered different from each other if any of the following characteristics vary;

(a) the neat resin plus monomer content;

(b) the application technique or;

(c) the control technique.

ii. The permittee shall calculate VOC emissions factors for each different process stream by using the appropriate equations in table 1 to Subpart WWW of 40 CFR 63 for open molding (see d)(1)f.).

iii. The emission factor calculation should include any and all emission reduction techniques. If vapor suppressants are used to reduce VOC emissions, the permittee shall determine the vapor suppressant effectiveness (VSE) by conducting testing according to the procedures specified in appendix A to Subpart WWW of 40 CFR part 63.

iv. If the calculated emission factor is less than or equal to the appropriate emission limit, the owner or operator has demonstrated that this process stream complies with the emission limit in table 2 of OAC rule 3745-21-25.

It is not necessary that all process streams, considered individually, demonstrate compliance to use this option for some process streams. However, for any individual resin being used, if any of the process streams that include that resin are to be used in any averaging calculations described in d)(2)b. d)(2)c. or d)(2)d., then all process streams using that individual resin shall be included in the averaging calculations.

If after the permittee has initially demonstrated that a specific combination of an individual resin and application method meets an applicable emission limit, and the resin changes or the monomer content increases, or the permittee changes the application method, then the permittee again shall demonstrate that the individual resin meets its emission limit as specified above. If any of the previously mentioned changes results in a situation where an individual resin exceeds its applicable emission limit in table 2 of OAC rule 3745-21-25, the

permittee shall begin collecting resin use records and calculate compliance using one of the averaging options in d)(2)b. d)(2)c. or d)(2)d. on a twelve-month rolling average.

- b. Demonstrate that, on average, the individual VOC emissions limits for each unique combination of operation type and resin application method shown in table 2 of OAC rule 3745-21-25 that applies to the facility are met.
  - i. Group the process streams described in table 2 of OAC rule 3745-21-25 by operation type and resin application method and then calculate a weighted average emission factor based on the amounts of each individual resin used for the last twelve months.

To do this, sum the product of each individual VOC emissions factor calculated in paragraph d)(1)f. of this rule and the amount of neat resin plus usage that corresponds to the individual factors and divide the numerator by the total amount of neat resin plus used in that operation type as shown in the following equation:

$$\text{Average Organic HAP Emissions Factor} = \frac{\sum_{i=1}^n (\text{Actual Process Stream } EF_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i}$$

where:

Actual Process Stream  $EF_i$  = actual VOC emissions factor for process stream  $i$ , pounds of VOC per ton of neat resin plus.

$\text{Material}_i$  = the amount of neat resin plus or neat gel coat plus used during the last twelve calendar months for process stream  $i$ , in tons.

$n$  = number of process streams where the permittee calculated a VOC emissions factor.

- ii. The owner or operator may, but is not required to, include process streams where the owner or operator has demonstrated compliance as described in d)(2)a., subject to the limitations described in paragraph d)(2)a.iv. and the permittee is not required to and should not include process streams for which the will demonstrate compliance using the procedures in paragraph d)(2)d.
- iii. Compare each VOC emissions factor calculated in paragraph d)(2)(b.i. with its corresponding VOC emissions limit in table 2 of OAC rule 3745-21-25. If all emissions factors are equal to or less than their corresponding emission limits, then the operation is in compliance.

- c. Demonstrate each month that each weighted average of the VOC emissions limits in table 2 of OAC rule 3745-21-25 that apply are being met. When using this option, the permittee shall demonstrate compliance with the weighted average VOC emissions limit for all open molding operations.
  - i. Each month calculate the weighted average VOC emissions limit for all open molding operations for the facility for the last twelve-month period to determine the VOC emissions limit the owner or operator shall meet.

To do this, multiply the individual VOC emissions limits in table 2 of OAC rule 3745-21-25 for each open molding operation type by the amount of neat resin plus used in the last twelve months for each open molding operation type, sum these results, and then divide this sum by the total amount of neat resin plus used in open molding over the last twelve months as shown in the following equation:

$$\text{Weighted Average VOC Emission Limitation} = \frac{\sum_{i=1}^n (EL_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i}$$

where:

EL<sub>i</sub> = VOC emissions limit for operation type i, pounds per ton from table 2 of OAC rule 3745-21-25.

Material<sub>i</sub> = amount of neat resin plus used during the last twelve-month period for operation type i, tons.

n = number of operations

- ii. Each month calculate the weighted average VOC emissions factor for open molding

To do this, multiply the actual open molding operation VOC emissions factors calculated in paragraph d)(2)(a.ii. of this rule and the amount of neat resin plus used in each open molding operation type, sum the results, and divide this sum by the total amount of neat resin plus used in open molding operations as shown in the following equation

$$\text{Actual Weighted Average VOC Emissions Factor} = \frac{\sum_{i=1}^n (\text{Actual Operation } EF_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i}$$

where:

Actual Operation  $E_{Fi}$  = Actual VOC emissions factor for operation type  $i$ , pounds of VOC per ton of neat resin plus or neat gel coat plus.

Material $_i$  = amount of neat resin plus or neat gel coat plus used during the last twelve calendar months for operation type  $i$ , tons.

$n$  = number of operations

- iii. Compare the values calculated in d)(2)c.i and d)(2)c.ii. If each twelve-month rolling average VOC emissions factor is less than or equal to the corresponding twelve-month rolling average VOC emissions limit, then the operation is in compliance.
- d. Meet the VOC emissions limit for one application method and use the same resins for all application methods of that resin type.

This option is limited to resins of the same type. The resin types for which this option may be used are noncorrosion-resistant, corrosion-resistant and/or high strength, and tooling.

- i. For any combination of manual resin application and/or mechanical resin application, the permittee may elect to meet the VOC emissions limit for any one of these application methods and use the same resin in all of the resin application methods listed in this paragraph.
- ii. Table 4 of OAC rule 3745-21-25 presents the possible combinations based on the permittee selecting the application process that results in the highest allowable monomer content resin. If the resin's monomer content is below the applicable value shown in the table 4 of this rule, the resin is in compliance.
- iii. The owner or operator may also use a weighted average monomer content for each application method described in d)(2)d.i. Calculate the weighted average monomer content monthly. Use the equation in d)(2)b.i. except substitute monomer content for VOC emissions factor. The operation is in compliance if the weighted average monomer content based on the last twelve months of resin use is less than or equal to the applicable monomer contents in the table 4 of OAC rule 3745-21-25.
- iv. The permittee may simultaneously use the averaging provisions in d)(2)b. or d)(2)c. to demonstrate compliance for any operations and/or resins the owner or operator does not include in the compliance demonstrations in d)(2)d.i. and d)(2)d.ii. However, any resins for which the permittee claims compliance under the option in d)(2)d.i. and d)(2)d.ii. shall not be included in any of the averaging calculations described in d)(2)b. or d)(2)c.

- v. The owner or operator does not have to keep records of resin use for any of the individual resins where the owner or operator demonstrates compliance under the option in d)(2)d.i. unless the owner or operator elects to include that resin in the averaging calculations described in d)(2)d.ii.
  - vi. If the permittee is averaging monomer contents to meet any monomer content limits specified in table 4 of OAC rule 3745-2125, the permittee shall collect and keep records of resin use, monomer content, and operation where the resin is used.
- (3) The permittee shall demonstrate continuous compliance with each VOC control requirement that applies to the affected operations according to the following methods:
- a. Compliance with VOC emissions limits is demonstrated by maintaining a VOC emissions factor value less than or equal to the appropriate VOC emissions limit listed in table 2 of OAC rule 3745-21-25, on a twelve-month rolling average (see d)(2)b. or d)(2)c.) and/or by including in each compliance report a statement that individual resins and gel coats, as applied (as described in d)(2)a., meet the appropriate VOC emissions limit.
  - b. Compliance with monomer content limits in table 4 of OAC rule 3745-21-25 is demonstrated by maintaining an average monomer content value less than or equal to the appropriate monomer contents listed in table 4 of this rule, on a twelve-month rolling average (see d)(2)d., and/or by including in each compliance report a statement that resins and gel coats individually meet the appropriate monomer content limits.
- (4) The permittee shall keep the following records:
- a. A copy of each applicability notification and compliance status report submitted to comply with OAC rule 3745-21-25, including all documentation supporting any applicability or compliance status.
  - b. Copies of all data, assumptions and calculations used to determine monomer contents, VOC emissions factors in d)(2)a through d)(2)d.
- All records shall be retained by the owner or operator for a period of not less than five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record and shall be made available to the director or any authorized representative of the director for review during normal business hours.
- (5) The permit to install for this emissions unit P003 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other

approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant:

Pollutant: Styrene

TLV (mg/m<sup>3</sup>): 114,650 mg/m<sup>3</sup>

Maximum Hourly Emission Rate (lbs/hr): 1.54

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m<sup>3</sup>): 257 µg/m<sup>3</sup>

MAGLC (µg/m<sup>3</sup>): 1,147 µg/m<sup>3</sup>

Physical changes to or changes in the method of operation of the emissions unit after its installation could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the Permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of the new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)", than the lowest TLV value previously modeled;
- b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

- (6) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- (7) The permittee shall collect and record the following information each month for the purpose of determining annual organic compound (OC) emissions as required for the Synthetic Minor Title V Fee Emissions Report:
- a. the name and identification of each cleanup material employed;
  - b. the OC content of each cleanup material, in pounds per gallon;
  - c. the volume, in gallons, of each cleanup material employed; and
  - d. the total OC emissions from all coatings employed, in tons [the sum of d)(6)b. times d)(6)c. for all cleanup materials employed, divided by 2000 pounds per ton].
- e) Reporting Requirements
- (1) The permittee shall submit semiannual compliance status reports containing the following information:
- a. Company name and address.
  - b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
  - c. Date of the report and beginning and ending dates of the reporting period.
  - d. If there are no deviations from any VOC emissions limitations and operating limits that apply and there are no deviations from the applicable work practice standards in table 1 of OAC rule 3745-21-25, a statement that there were no deviations from VOC emissions limitations, operating limits, or work practice standards during the reporting period.
  - e. For each deviation from a VOC emissions limitation or operating limit and for each deviation from a work practice standard that occurs, the compliance report shall contain the following information:
    - i. The total operating time of each affected operation during the reporting period.

- ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- f. If the permittee has changed compliance options (in d)(2)a. through d)(2)d.) since the last compliance report, the permittee shall state in the compliance report the date when the change occurred and the compliance option that was implemented.

Each compliance report shall cover the semiannual reporting period from January 1st through June 30th or the semiannual reporting period from July 1st through December 31st of each year. The semiannual compliance reports shall be submitted no later than thirty calendar days after the end of each six-month period to the appropriate Ohio EPA district office or local air agency.

The first compliance report shall cover the period beginning upon the date of issuance of this permit and ending on June 30th or December 31st, whichever date is the first.

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (3) The permittee shall submit annual reports that specify the total VOC and OC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Synthetic Minor Title V Fee Emission Report.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations specified in b) shall be determined in accordance with the following methods:

- a. Emissions Limitation –

The VOC emissions from this emissions unit shall not exceed 1.54 pounds per hour excluding cleanup materials.

Applicable Compliance Method –

Compliance is based on multiplying the maximum hourly resin use rate of 35 pounds (0.0175ton) per hour multiplied by the VOC emission factor 88 pounds VOC per ton of resin (mechanical resin application, non-corrosion resistant/high strength) from Table 2 of OAC rule 3745-21-25.



b. Emissions Limitation –

The VOC emissions from this emissions unit shall not exceed 6.67 tons per year excluding cleanup materials.

Applicable Compliance Method –

Compliance is based on the hourly emissions limitation multiplied by 8,760 hours per year and divided by 2,000 pounds per ton.

c. Emissions Limitation –

VOC emissions limitations of Table 2 from OAC rule 3745-21-25.

Applicable Compliance Method –

Compliance is based on the monitoring and record keeping requirements of d)(1) through d)(4).

g) Miscellaneous Requirements

(1) None.



2. P004, LPMC and RTM

Operations, Property and/or Equipment Description:

Low Pressure Molding Compound (LPMC) and Resin Transfer Molding (RTM)

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. b)(1)e, (d)(5) and d)(6).

(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	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 0.54 pound per hour and 2.37 tons per year excluding cleanup materials.  See b)(2)a. and b)(2)b.  Compliance with this rule also includes compliance with the requirements of OAC rule 3745-21-25.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) as effective 12/01/06	See b)(2)c.
c.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63, Subpart WWWW)	See Section B.2. through B.5.
d.	OAC rule 3745-21-25	See b)(2)d.
e.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(2) and d)(3).

- (2) Additional Terms and Conditions
- a. The permittee shall not use VOC cleanup materials in this emissions unit.
  - b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
  - c. BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC is less than 10 tons/year
  - d. According to OAC rule 3745-21-25(C)(2)(k) closed molding operations are excluded from the requirements of OAC rule 3745-21-25.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall record the following information for each month:
    - a. The company identification of each molding compound (as purchased), catalyst and VOC additives employed;
    - b. The weight, in tons, of each molding compound used;
    - c. The weight, in pounds, of each catalyst employed;
    - d. The VOC (monomer) concentration of each molding compound, in percent by weight;
    - e. The method of molding employed (resin transfer or compression sheet);
    - f. The VOC emission factor for each resin employed, in pounds VOC per ton of resin employed;
    - g. The VOC emissions, in pounds, d)(1)b. multiplied by d)(1)f. for each resin applied.

Molding compound use records may be based on purchase records if the permittee can reasonably estimate how the resin is applied. The monomer content records may be based on MSDS or on molding compound specifications supplied by the molding compound supplier.

- (2) The permit to install for this emissions unit P004 was evaluated based on the actual materials (coatings) employed, and the design parameters of the emissions units exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarized the results of the modeling for the "worst-case" pollutant(s).

Pollutant: Styrene

TLV(mg/m<sup>3</sup>): 114,650

Maximum Hourly Emission Rate (lbs/hr): 1.37

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 231

MAGLC(ug/m<sup>3</sup>): 1,147

Physical changes to or changes in the method of operation of the emissions unit after its installation could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the Permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of the new materials, that would result in the emission of a compound with a lower Threshold Limit Value(TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)", than the lowest TLV value previously modeled;
- b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic contaminant not, previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC

rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

- (3) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- (4) The permittee shall collect and record the following information each month for the purpose of determining annual organic compound (OC) emissions as required for the Synthetic Minor Title V Fee Emissions Report:
- a. the name and identification of each cleanup material employed;
  - b. the OC content of each cleanup material, in pounds per gallon;
  - c. the volume, in gallons, of each cleanup material employed; and
  - d. the total OC emissions from all coatings employed, in tons [the sum of d)(2)b. times d)(2)c. for all cleanup materials employed, divided by 2000 pounds per ton].
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
  - (2) The permittee shall submit annual reports that specify the total VOC and OC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Synthetic Minor Title V Fee Emission Report.



f) Testing Requirements

(1) Compliance with the Emissions Limitations specified in b) shall be determined in accordance with the following methods:

a. Emissions Limitation –

The VOC emissions from this emissions unit shall not exceed 0.54 pound per hour excluding cleanup materials.

Applicable Compliance Method –

Compliance is based on multiplying the maximum hourly closed mold injection rate of 104 pounds per hour multiplied by the VOC loss factor of 1percent by weight (U.S. EPA, AP-42, Table 4.4-2, February 2007) plus the maximum hourly compression sheet molding rate of 23 pounds per multiplied by the VOC loss factor of 0.2 percent by weight (Composite Fabricators Association, July 2001).

b. Emissions Limitation –

The VOC emissions from this emissions unit shall not exceed 2.37 tons per year excluding cleanup materials.

Applicable Compliance Method –

Compliance is based on the hourly emissions limitation multiplied by 8,760 hours per year and divided by 2,000 pounds per ton.

g) Miscellaneous Requirements

(1) None.



3. P005, Gelcoat spray area

Operations, Property and/or Equipment Description:

Gelcoat Booth for FRP

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. b)(1)e, d)(5) and d)(6).

(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	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 1.32 pounds per hour and 5.78 tons per year excluding cleanup materials.  See b)(2)a. and b)(2)b.  Compliance with this rule also includes compliance with the requirements of OAC rule 3745-21-25.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) as effective 12/01/06	See b)(2)c.
c.	OAC rule 3745-31-05(D) (synthetic minor to avoid Title V and 40 CFR Part 63, Subpart WWWW)	See Section B.2. through B.5.



d.	OAC rule 3745-21-25	The VOC emissions from this emissions unit shall not exceed the limitations specified in Table 2 of the rule for gel coat operations.  See b)(2)d.
e.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(5).

(2) Additional Terms and Conditions

- a. The permittee shall not use VOC cleanup materials in this emissions unit.
- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- c. BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit for VOC is less than 10 tons/year
- d. The VOC threshold for this facility calculated according OAC 3745-21-25(F) is less than 100 tons per year. The VOC emissions from gel coat application in this emissions unit shall not exceed the following:

Type of operation	Application method	VOC emissions limit
Open molding: gel coat	Tooling gel coat	440 pounds/ton applied
	White/off white pigmented gel coat	267 pounds/ton applied
	All other pigmented gel coat	377 pounds/ton applied
	CR/HS or high performance gel coat	605 pounds/ton applied
	Fire retardant gel coat	854 pounds/ton applied
	Clear production gel coat	522 pounds/ton applied

- c) Operational Restrictions
- (1) Keep containers that store VOC containing materials closed or covered except during the addition or removal of materials. Bulk VOC-containing materials storage tanks may be vented as necessary for safety.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall record the following information for each month:
- a. The company identification of each neat gel coat (as purchased), catalyst and VOC additives employed;
  - b. The weight, in tons, of each gel coat applied;
  - c. The weight, in pounds, of each catalyst employed;
  - d. The VOC (monomer) concentration of each gel coat, as applied, in percent by weight\*;
  - e. The method of application for each gel coat employed (manual, atomized or non-atomized application);
  - f. The VOC emission factor for each gel coat employed, in pounds VOC per ton of gel coat employed calculated using the equations in table 1 to Subpart WWWW of 40CFR 63 or any VOC emissions factor approved by U.S. EPA;
  - g. The VOC emissions, in pounds, d)(1)b. multiplied by d)(1)f. for each gel coat applied.
- Gel coat use records may be based on purchase records if the permittee can reasonably estimate how the gel coat is applied. The monomer content records may be based on MSDS or on gel coat specifications supplied by the gel coat supplier.
- \*This term is intended to be synonymous “neat gel coat plus” as used in OAC rule 3745-21-25. Neat gel coat plus means neat gel coat plus any VOC-containing materials that are added to the gel coat by the supplier or the facility. Neat gel coat plus does not include any added filler, reinforcements, catalysts, or promoters. Neat gel coat plus does include any additions of styrene or methyl methacrylate monomer in any form, including in catalysts and promoters.
- (2) The permittee shall use one the following methods to demonstrate compliance with the VOC emissions limitations of Table 2 of OAC rule 3745-21-25:
- a. Demonstrate that an individual gel coat, as applied, meets the applicable emission limit.
    - i. Calculate the actual VOC emissions factor for each different process stream within each operation type.

A process stream is defined as each individual combination of gel coat, application technique, and control technique.

Process streams within operations types are considered different from each other if any of the following characteristics vary;

- (a) the neat gel coat plus monomer content;
  - (b) the application technique or;
  - (c) the control technique.
- ii. The permittee shall calculate VOC emissions factors for each different process stream by using the appropriate equations in table 1 to Subpart WWWW of 40 CFR 63 for open molding (see d)(1)f.).
  - iii. The emission factor calculation should include any and all emission reduction techniques. If vapor suppressants are used to reduce VOC emissions, the permittee shall determine the vapor suppressant effectiveness (VSE) by conducting testing according to the procedures specified in appendix A to Subpart WWWW of 40 CFR part 63.
  - iv. If the calculated emission factor is less than or equal to the appropriate emission limit, the owner or operator has demonstrated that this process stream complies with the emission limit in table 2 of OAC rule 3745-21-25.

It is not necessary that all process streams, considered individually, demonstrate compliance to use this option for some process streams. However, for any individual gel coat being used, if any of the process streams that include that gel coat are to be used in any averaging calculations described in d)(2)b. d)(2)c. or d)(2)d., then all process streams using that individual gel coat shall be included in the averaging calculations.

If after the permittee has initially demonstrated that a specific combination of an individual gel coat and application method meets an applicable emission limit, and the gel coat changes or the monomer content increases, or the permittee changes the application method, then the permittee again shall demonstrate that the individual gel coat meets its emission limit as specified above. If any of the previously mentioned changes results in a situation where an individual gel coat exceeds its applicable emission limit in table 2 of OAC rule 3745-21-25, the permittee shall begin collecting gel coat use records and calculate compliance using one of the averaging options in d)(2)b. d)(2)c. or d)(2)d. on a twelve-month rolling average.

- b. Demonstrate that, on average, the individual VOC emissions limits for each unique combination of operation type and gel coat application method shown in table 2 of OAC rule 3745-21-25 that applies to the facility are met.

- i. Group the process streams described in table 2 of OAC rule 3745-21-25 by operation type and gel coat application method and then calculate a weighted average emission factor based on the amounts of each individual gel coat used for the last twelve months.

To do this, sum the product of each individual VOC emissions factor calculated in paragraph d)(1)f. of this rule and the amount of neat gel coat plus usage that corresponds to the individual factors and divide the numerator by the total amount of neat gel coat plus used in that operation type as shown in the following equation:

$$\text{Average Organic HAP Emissions Factor} = \frac{\sum_{i=1}^n (\text{Actual Process Stream } EF_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i}$$

where:

Actual Process Stream  $EF_i$  = actual VOC emissions factor for process stream  $i$ , pounds of VOC per ton of neat gel coat plus.

$\text{Material}_i$  = the amount of neat gel coat plus or neat gel coat plus used during the last twelve calendar months for process stream  $i$ , in tons.

$n$  = number of process streams where the permittee calculated a VOC emissions factor.

- ii. The owner or operator may, but is not required to, include process streams where the owner or operator has demonstrated compliance as described in d)(2)a., subject to the limitations described in paragraph d)(2)a.iv. and the permittee is not required to and should not include process streams for which the will demonstrate compliance using the procedures in paragraph d)(2)d.
  - iii. Compare each VOC emissions factor calculated in paragraph d)(2)(b.i. with its corresponding VOC emissions limit in table 2 of OAC rule 3745-21-25. If all emissions factors are equal to or less than their corresponding emission limits, then the operation is in compliance.
- c. Demonstrate each month that each weighted average of the VOC emissions limits in table 2 of OAC rule 3745-21-25 that apply are being met. When using this option, the permittee shall demonstrate compliance with the weighted average VOC emissions limit for all open molding operations.

- i. Each month calculate the weighted average VOC emissions limit for all open molding operations for the facility for the last twelve-month period to determine the VOC emissions limit the owner or operator shall meet.

To do this, multiply the individual VOC emissions limits in table 2 of OAC rule 3745-21-25 for each open molding operation type by the amount of neat gel coat plus used in the last twelve months for each open molding operation type, sum these results, and then divide this sum by the total amount of neat gel coat plus used in open molding over the last twelve months as shown in the following equation:

$$\text{Weighted Average VOC Emission Limitation} = \frac{\sum_{i=1}^n (EL_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i}$$

where:

EL<sub>i</sub> = VOC emissions limit for operation type i, pounds per ton from table 2 of OAC rule 3745-21-25.

Material<sub>i</sub> = amount of neat gel coat plus used during the last twelve-month period for operation type i, tons.

n = number of operations

- ii. Each month calculate the weighted average VOC emissions factor for open molding

To do this, multiply the actual open molding operation VOC emissions factors calculated in paragraph d)(2)(a.ii. of this rule and the amount of neat gel coat plus used in each open molding operation type, sum the results, and divide this sum by the total amount of neat gel coat plus used in open molding operations as shown in the following equation

$$\text{Actual Weighted Average VOC Emissions Factor} = \frac{\sum_{i=1}^n (\text{Actual Operation } EF_i \times \text{Material}_i)}{\sum_{i=1}^n \text{Material}_i}$$

where:

Actual Operation EF<sub>i</sub> = Actual VOC emissions factor for operation type i, pounds of VOC per ton of neat gel coat plus or neat gel coat plus.

Material<sub>i</sub> = amount of neat gel coat plus or neat gel coat plus used during the last twelve calendar months for operation type i, tons.

n = number of operations

- iii. Compare the values calculated in d)(2)c.i and d)(2)c.ii. If each twelve-month rolling average VOC emissions factor is less than or equal to the corresponding twelve-month rolling average VOC emissions limit, then the operation is in compliance.
- d. Meet the VOC emissions limit for one application method and use the same gel coats for all application methods of that gel coat type.

This option is limited to gel coats of the same type. The gel coat types for which this option may be used are noncorrosion-resistant, corrosion-resistant and/or high strength, and tooling.

- i. For any combination of manual gel coat application and/or mechanical gel coat application, the permittee may elect to meet the VOC emissions limit for any one of these application methods and use the same gel coat in all of the gel coat application methods listed in this paragraph.
- ii. Table 4 of OAC rule 3745-21-25 presents the possible combinations based on the permittee selecting the application process that results in the highest allowable monomer content gel coat. If the gel coat's monomer content is below the applicable value shown in the table 4 of this rule, the gel coat is in compliance.
- iii. The owner or operator may also use a weighted average monomer content for each application method described in d)(2)d.i. Calculate the weighted average monomer content monthly. Use the equation in d)(2)b.i. except substitute monomer content for VOC emissions factor. The operation is in compliance if the weighted average monomer content based on the last twelve months of gel coat use is less than or equal to the applicable monomer contents in the table 4 of OAC rule 3745-21-25.
- iv. The permittee may simultaneously use the averaging provisions in d)(2)b. or d)(2)c. to demonstrate compliance for any operations and/or gel coats the owner or operator does not include in the compliance demonstrations in d)(2)d.i. and d)(2)d.ii. However, any gel coats for which the permittee claims compliance under the option in d)(2)d.i. and d)(2)d.ii. shall not be included in any of the averaging calculations described in d)(2)b. or d)(2)c.
- v. The owner or operator does not have to keep records of gel coat use for any of the individual gel coats where the owner or operator demonstrates compliance under the option in d)(2)d.i. unless the owner or operator elects to include that gel coat in the averaging calculations described in d)(2)d.ii.

- vi. If the permittee is averaging monomer contents to meet any monomer content limits specified in table 4 of OAC rule 3745-2125, the permittee shall collect and keep records of gel coat use, monomer content, and operation where the gel coat is used.
- (3) The permittee shall demonstrate continuous compliance with each VOC control requirement that applies to the affected operations according to the following methods:
  - a. Compliance with VOC emissions limits is demonstrated by maintaining a VOC emissions factor value less than or equal to the appropriate VOC emissions limit listed in table 2 of OAC rule 3745-21-25, on a twelve-month rolling average (see d)(2)b. or d)(2)c.) and/or by including in each compliance report a statement that individual gel coats and gel coats, as applied (as described in d)(2)a., meet the appropriate VOC emissions limit.
  - b. Compliance with monomer content limits in table 4 of OAC rule 3745-21-25 is demonstrated by maintaining an average monomer content value less than or equal to the appropriate monomer contents listed in table 4 of this rule, on a twelve-month rolling average (see d)(2)d., and/or by including in each compliance report a statement that gel coats and gel coats individually meet the appropriate monomer content limits.
- (4) The permittee shall keep the following records:
  - a. A copy of each applicability notification and compliance status report submitted to comply with OAC rule 3745-21-25, including all documentation supporting any applicability or compliance status.
  - b. Copies of all data, assumptions and calculations used to determine monomer contents, VOC emissions factors in d)(2)a through d)(2)d.

All records shall be retained by the owner or operator for a period of not less than five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record and shall be made available to the director or any authorized representative of the director for review during normal business hours.
- (5) The permit to install for this emissions unit P005 was evaluated based on the actual materials (coatings) employed, and the design parameters of the emissions units exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarized the results of the modeling for the "worst-case" pollutant.

Pollutant: Styrene

TLV(mg/m<sup>3</sup>): 114,650

Maximum Hourly Emission Rate (lbs/hr): 1.51

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 254

MAGLC(ug/m<sup>3</sup>): 1,147.

Physical changes to or changes in the method of operation of the emissions unit after its installation could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the Permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of the new materials, that would result in the emission of a compound with a lower Threshold Limit Value(TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)", than the lowest TLV value previously modeled;
- b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic contaminant not, previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

- (6) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
  - a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

- c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- (7) The permittee shall collect and record the following information each month for the purpose of determining annual organic compound (OC) emissions as required for the Synthetic Minor Title V Fee Emissions Report:
- a. the name and identification of each cleanup material employed;
  - b. the OC content of each cleanup material, in pounds per gallon;
  - c. the volume, in gallons, of each cleanup material employed; and
  - d. the total OC emissions from all coatings employed, in tons [the sum of d)(6)b. times d)(6)c. for all cleanup materials employed, divided by 2000 pounds per ton].
- e) Reporting Requirements
- (1) The permittee shall submit semiannual compliance status reports containing the following information:
- a. Company name and address.
  - b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
  - c. Date of the report and beginning and ending dates of the reporting period.
  - d. If there are no deviations from any VOC emissions limitations and operating limits that apply and there are no deviations from the applicable work practice standards in table 1 of OAC rule 3745-21-25, a statement that there were no deviations from VOC emissions limitations, operating limits, or work practice standards during the reporting period.
  - e. For each deviation from a VOC emissions limitation or operating limit and for each deviation from a work practice standard that occurs, the compliance report shall contain the following information:
    - i. The total operating time of each affected operation during the reporting period.
    - ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
  - f. If the permittee has changed compliance options (in d)(2)a. through d)(2)d.) since the last compliance report, the permittee shall state in the compliance report the date when the change occurred and the compliance option that was implemented.

Each compliance report shall cover the semiannual reporting period from January 1st through June 30th or the semiannual reporting period from July 1st through December 31st of each year. The semiannual compliance reports shall be submitted no later than thirty calendar days after the end of each six-month period to the appropriate Ohio EPA district office or local air agency.

The first compliance report shall cover the period beginning upon the date of issuance of this permit and ending on June 30th or December 31st, whichever date is the first.

- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
- (3) The permittee shall submit annual reports that specify the total VOC and OC emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Synthetic Minor Title V Fee Emission Report.

f) **Testing Requirements**

- (1) Compliance with the Emissions Limitations specified in b) shall be determined in accordance with the following methods:

a. **Emissions Limitation –**

The VOC emissions from this emissions unit shall not exceed 1.32 pounds per hour excluding cleanup materials.

**Applicable Compliance Method –**

Compliance is based on multiplying the maximum hourly gel coat use rate of 30.7 pounds (0.015 ton) per hour multiplied by the VOC emission factor 377 pounds VOC per ton of resin (atomized, non-vsr, pigmented) from Table 2 of OAC rule 3745-21-25.

b. **Emissions Limitation –**

The VOC emissions from this emissions unit shall not exceed 5.78 tons per year excluding cleanup materials.

**Applicable Compliance Method –**

Compliance is based on the hourly emissions limitation multiplied by 8,760 hours per year and divided by 2,000 pounds per ton.



Emissions Limitation –

VOC emissions limitations of Table 2 from OAC rule 3745-21-25.

Applicable Compliance Method –

Compliance is based on the monitoring and record keeping requirements of d)(1) through d)(4).

g) Miscellaneous Requirements

(1) None.