



Environmental Protection Agency

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

12/8/2011

TOM BRYANT
AMERICAN MARBLE INDUSTRIES
2700 ATLANTIC BLVD NE
CANTON, OH 44705

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

Facility ID: 1576051531
Permit Number: P0106482
Permit Type: Renewal
County: Stark

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, The Canton Repository. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

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

and Canton City Health Department
420 Market Avenue
Canton, OH 44702-1544

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 Canton City Health Department at (330)489-3385.

Sincerely,

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

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



Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

American Marble Industries in Canton, Ohio produces cultured marble and solid surface products through its open molding gel coat operation, emissions unit P001, and its closed molding resin casting operation, emission unit P002. The gel coat is spray applied within a spray booth equipped with a particulate filter air pollutant control device. The resin casting involves pouring resin into the mold with no add-on air pollutant control device. Both operations use materials that contain styrene, which is a chemical on the Clean Air Act Amendments (CAAA) of 1990 List of Hazardous Air Pollutants (HAP).

3. Facility Emissions and Attainment Status:

American Marble Industries is located in Stark County, which is in attainment with all National Ambient Air Quality Standards (NAAQS), with the exception of particulate matter with an aerodynamic diameter of 2.5 microns or less (PM_{2.5}). Volatile organic compounds (VOC) are the only criteria pollutants emitted from the facility. VOC emissions primarily include the total styrene monomer organic HAPs emitted from emissions units P001 and P002 since the cleaning materials contain no VOC.

4. Source Emissions:

Based on the facility's maximum unrestricted potential to emit (PTE), the facility is above the Title V major source threshold of 10.0 tons per year (tpy) for a single HAP (as styrene). The initial Federally Enforceable State Operating Permit (FESOP) P0101284 issued to the facility on 02/09/2004 contained a combined styrene emissions limit of 9.7 tons per year for P001 and P002, and a material maximum styrene content restriction, to restrict the facilities potential to emit below the major source threshold. With these restrictions, the facility has avoided Title V and 40 CFR Part 63 Subpart WWWW.

The FESOP P0101284 did not include a process variable restriction in conjunction with the restricted PTE per U.S. EPA guidance. In order to comply with that guidance, the facility requested to have material usage restrictions as their process variable restriction. During the material usage restriction determination, the facility decided to have the "chopper gun" operations removed from P001 since they no longer use that operation and don't plan on using it in the future. This simplified the renewal permit P0106482 for P001 since only one material (gel coat) was used that needed to be restricted. The facility also noticed typos in the material maximum styrene content values, so those were also updated.

The following are the facility requested material usage restrictions and updated material maximum styrene content values that were included in the permit and resulted in restricted styrene emissions:

Gel coat emissions for P001:

$$E_{(\text{gel coat})} = W_{(\text{gel coat})} \times EF_{(\text{gel coat})} \times (1 \text{ ton}/2000 \text{ lbs})$$

Where:

$E_{(\text{gel coat})}$ = the styrene emissions from gel coat, in pounds per year.



$W_{(gel\ coat)} = \text{gel coat usage in pounds per year} = 48,000 \text{ lbs gel coat per year}$

$EF_{(gel\ coat)} = \text{the emission factor for styrene emissions from gel coat, in lbs styrene per pound gel coat.}$

For gel coat at the maximum 43% styrene restriction, $EF_{(gel\ coat)} = ((1.03646 \times \%HAP) - 0.195) = 0.25 \text{ lbs styrene per pound gel coat.}$

$$E_{(gel\ coat)} = 48,000 \text{ lbs gel coat} \times 0.25 \times (1 \text{ ton}/2000 \text{ lbs}) = 6.0 \text{ tons styrene per year}$$

Resin emissions for P002:

$$E_{(resin)} = W_{(resin)} \times EF_{(resin)} \times \text{weight percent of HAP} \times (1 \text{ ton}/2000 \text{ lbs})$$

Where:

$E_{(resin)}$ = the styrene emissions from resin, in pounds per year.

$W_{(resin)}$ = resin usage in pounds per year = 700,950 lbs resin per year

$EF_{(resin)}$ = the emission factor for styrene emissions from resin, in weight percent of starting styrene monomer emitted = 3%.

For resin, the maximum styrene restriction = 35%

$$E_{(resin)} = 700,950 \text{ lbs resin} \times 0.03 \times 0.35 \times (1 \text{ ton}/2000 \text{ lbs}) = 3.7 \text{ tons styrene per year}$$

Total emissions for Facility (with restrictions):

$$E_{(total)} = E_{(gel\ coat)} + E_{(resin)} = 6.0 + 3.7 = 9.7 \text{ tons styrene per year}$$

5. Conclusion:

Compliance with the rolling, 365-day material usage restriction, material content restriction and corresponding emissions limitation, along with the associated recordkeeping and reporting requirements in the permit, will ensure the facility remains a synthetic minor, through OAC rule 3745-31-05(D), with respect to HAP emissions and avoids Title V major source status and 40 CFR Part 63 Subpart WWWW major source status. Issuance of federally enforceable permit to install and operate (FEPTIO) P0106482 is recommended.

6. Please provide additional notes or comments as necessary:

Draft issuance is recommended since the federally enforceable restrictions were updated as described above.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
Styrene	9.7

PUBLIC NOTICE
12/8/2011 Issuance of Draft Air Pollution Permit-To-Install and Operate

AMERICAN MARBLE INDUSTRIES

2700 ATLANTIC BLVD NE,

CANTON, OH 44705

Stark County

FACILITY DESC.: All Other Plastics Product Manufacturing

PERMIT #: P0106482

PERMIT TYPE: Renewal

PERMIT DESC: Renewal FEPTIO for gel coat and resin casting operations with dry filtration system.

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: Dave Augenstein, Canton City Health Department, 420 Market Avenue, Canton, OH 44702-1544. Ph: (330)489-3385

Ohio

**Environmental
Protection Agency**

DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
AMERICAN MARBLE INDUSTRIES**

Facility ID:	1576051531
Permit Number:	P0106482
Permit Type:	Renewal
Issued:	12/8/2011
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
AMERICAN MARBLE INDUSTRIES

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Authorization

Facility ID: 1576051531
Application Number(s): A0039658, A0042232
Permit Number: P0106482
Permit Description: Renewal FEPTIO for gel coat and resin casting operations with dry filtration system.
Permit Type: Renewal
Permit Fee: \$0.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 12/8/2011
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:

AMERICAN MARBLE INDUSTRIES
2700 ATLANTIC BLVD NE
CANTON, OH 44705

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:

Canton City Health Department
420 Market Avenue
Canton, OH 44702-1544
(330)489-3385

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: P0106482

Permit Description: Renewal FEPTIO for gel coat and resin casting operations with dry filtration system.

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

Emissions Unit ID:

Company Equipment ID:
Superseded Permit Number:
General Permit Category and Type:

P001

Gelcoat and chopper operation
P0101284
Not Applicable

Emissions Unit ID:

Company Equipment ID:
Superseded Permit Number:
General Permit Category and Type:

P002

Resin casting
P0101284
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 Canton City Health Department 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 submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) Unless other arrangements have been approved by the Director (the appropriate Ohio EPA District Office or local air agency), all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - 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) Terms C.1.b)(1)a. and C.2.b)(1)a.

C. Emissions Unit Terms and Conditions



1. P001, Open Molding Gel coat operation

Operations, Property and/or Equipment Description:

Gel coat lay-up operation conducted within spray booth equipped with filters.

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. b)(1)a., b)(2)a., b)(2)c., c)(1), d)(2), and e)(1).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and 40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-5935)]	The maximum annual combined styrene emissions generated by emissions units P001 and P002 shall not exceed 9.7 tons per year, based on a rolling, 365-day summation of emissions See b)(2)a and b)(2)c.
b.	OAC rule 3745-31-05(A)(3)	See b)(2)b, c)(2), and section d)
c.	OAC rule 3745-21-07	Exempt. See b)(2)d.
d.	OAC rule 3745-21-25(A)(2)(e)	See b)(2)e. and d)(4)
e.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
f.	OAC rule 3745-17-11 (Table I)	Particulate emissions shall not exceed 0.551 lb/hr.

(2) Additional Terms and Conditions

- a. By request of the applicant and pursuant to OAC rule 3745-31-05(D), the Terms & Conditions listed in term a)(2)a. are federally enforceable and incorporated into this permit to limit the combined potential to emit for this emissions unit (P001) in combination with emissions unit P002.

The federally enforceable styrene limitation is based on the maximum styrene content restriction in term (2)c. and the maximum annual material usage in term c)(1) of this permit, and is established for the purposes of avoiding Title V applicability.

- b. This emissions unit shall employ arrestor pads for the control of overspray.
- c. The styrene content of each gel coat for P001 shall not exceed 43%, by weight, as employed.

The styrene content of each casting resin for P002 shall not exceed 35%, by weight, as employed.

- d. Upon achieving compliance with rule 3745-21-25 of the Ohio Administrative Code (OAC), the reinforced plastic composites production operations at the facility are not required to meet the requirements of OAC rule 3745-21-07.
- e. With the maximum styrene content restriction in (2)c., the maximum annual material usage restriction in c)(1), and the cleaning material restrictions in c)(2), the facility has a potential to emit for VOC of less than 10.0 tons per year for all reinforced plastic composites production operations, combined, and is excluded from the requirements of OAC rule 3745-21-25, except for the recordkeeping requirements specified in d)(4) of this permit.
- f. With the maximum styrene content restriction in (2)c. and maximum annual material usage restriction in c)(1), the facility is not a major source of hazardous air pollutant (HAP) emissions for styrene monomer, and, therefore, is not subject to 40 CFR Part 63, Subpart WWWW – National Emissions Standards for Hazardous Air Pollutants (NESHAP): Reinforced Plastic Composites Production.

c) Operational Restrictions

- (1) The maximum annual usage of gel coat for P001 shall not exceed 48,000 pounds, based upon a rolling, 12-month summation, and the maximum annual usage of casting resin for P002 shall not exceed 700,950 pounds based upon a rolling, 12-month summation.
- (2) Only acetone, super flush (consisting of 29% dimethyl glutarate, 9% oxybispropanolmethylether, 9% dimethyl adipate and 9% dimethyl succinate, by volume), and/or any 0% VOC containing material shall be used as cleanup materials in this emissions unit. These cleanup materials shall not be photochemically reactive materials.

- (3) The permittee shall operate and maintain the dry filtration system to control particulate emissions whenever this emissions unit is in operation.
- d) **Monitoring and/or Record Keeping Requirements**
- (1) The permittee shall collect and record the following information for each day for emissions unit P001:
- a. the name and company identification number of each gel coat and cleanup material employed;
 - b. the number of pounds of each gel coat employed;
 - c. the percent styrene of each gel coat employed;
 - d. the number of gallons of clean-up materials (acetone, super flush, etc) employed;
 - e. the volatile organic compound content of clean-up materials (acetone, super flush, etc), in pounds per gallon;
 - f. the total volatile organic compound emission rate for gel coats employed, in pounds per day as calculated per the method in section f)(1)a.;
 - g. the total styrene emission rate for all gel coats, in pounds per day; as calculated per the method in section f)(1)a.;
 - h. the total volatile organic compound emission rate for all clean-up materials (acetone, super flush, etc) employed, in pounds per day as calculated per the method in section f)(1)d; and
 - i. the total number of hours the emissions unit was in operation.
- Note: The coating information must be for the coatings as employed, including any thinning solvents added before their use.
- (2) The permittee shall collect and record the following information each day for emissions units P001 and P002 combined:
- a. the total combined styrene emission rate for all casting resins and gel coats employed as calculated per the method in section f)(1)a.;
 - b. the total combined styrene emission rate for all casting resins and gel coats employed, in pounds per day; and
 - c. the total combined rolling, 365-day summation of styrene emissions, in tons per year.
- (3) The permittee shall maintain a record of whenever the dry exhaust filtration system is not employed when the emissions unit is in operation.

- (4) The permittee shall maintain an up-to-date record of the potential to emit for VOC from all reinforced plastic composites production operations, and shall employ emission factors or emission estimates in the calculation of the potential to emit that meet the requirements of OAC rule 3745-21-25(E).
- (5) For further information regarding records retention requirements, see Part A: Standard Terms and Conditions in this permit.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. identify all exceedances of the 43%, by weight, styrene content limitation for the gel coats employed in this emissions unit;
 - ii. identify all exceedances of the rolling, 12-month restriction on the gel coat usage in this emissions unit; and
 - iii. identify all exceedances of the rolling, 365-day styrene emission limitation for emissions units P001 and P002 combined.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (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 PER shall additionally identify the following:
 - a. any monthly record showing the use of any cleanup material other than those listed in term c)(2) above; and
 - b. Identify any time the dry exhaust filtration system was not in service when the emissions unit was in operation.
- (4) For further information regarding the reporting requirements, see Part A: Standard Terms and Conditions in this permit.

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. Emissions Limitation:

The maximum annual combined styrene emissions generated by emissions units P001 and P002 shall not exceed 9.7 tons per year, based on a rolling, 365-day summation of emissions.

Applicable Compliance Method:

To calculate emissions from gel coat operations from P001, the permittee shall employ the following formula:

$$E_{(\text{gel coat})} = \text{summation of } (W_i \times EF_i)$$

Where:

$E_{(\text{gel coat})}$ = the daily styrene emissions from all gel coat, in pounds per day.

i = subscript denoting a specific gel coat employed.

W_i = the weight of gel coat "i" employed, in pounds per day

EF_i = the emission factor for styrene emissions* from gel coat "i" employed, in pounds per day.

For gel coat at 43% styrene, $EF_i = 0.25$ lbs styrene per pound gel coat.

*Reference: [68 FR 19402, Apr. 21, 2003, as amended at 70 FR 50129, Aug. 25, 2005]

$EF = ((1.03646 \times \%HAP) - 0.195) = \text{lbs styrene per lb of material; emission factor equation for open molding operation - atomized spray gel coat application}$

Table 1 to Subpart WWWW of Part 63—Equations To Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams

To calculate emissions from casting resins for P002, the permittee shall employ the following formula from AP-42 4.4 1/95:

The permittee uses a casting resin containing a maximum of 35% styrene, by weight. The emission factor is 0.03; therefore:

$$\text{pounds resin/day} \times 0.35 \times 0.03 = \text{pounds styrene/day}$$

To calculate total combined emissions from P001 and P002, the permittee shall employ the following formula:

$$\text{Combined Emissions} = \text{P001 emissions} + \text{P002 emissions}$$

Note: The equations above can be used for calculating VOC emissions by inserting the % VOC in place of the % styrene.

Compliance shall be based upon the record keeping requirements in section d)(1) and d)(2).

b. Emissions Limitation:

Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

c. Emissions Limitation:

Particulate emissions shall not exceed 0.551 lb/hr.

Applicable Compliance Method:

To determine the actual worst case emission rate for particulate matter, the following equation may be used:

$$E = [\text{maximum coating solids usage rate (in pounds per hour)}] \times (1-TE) \times (1-CE)$$

$$E = \text{particulate emissions rate (lbs/hr)}$$

TE = transfer efficiency = 70%, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency = 95% (both the dry exhaust filtration system)



If required, compliance shall be demonstrated based upon the emission testing procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

d. Recordkeeping Requirement:

The total volatile organic compound emission rate for all clean-up materials (acetone, super flush, etc) employed (term d)(1)h. above).

Applicable Compliance Method:

To calculate the volatile organic compound (VOC) emission rate of clean-up material, the permittee shall employ the following formula:

$$E_{(\text{clean-up material})} = \text{summation of } (V_i \times C_i)$$

Where:

$E_{(\text{clean-up material})}$ = the daily volatile organic compound emissions from all clean-up materials employed, in pounds per day.

i = subscript denoting a specific clean-up material (acetone, superflush, etc) employed.

V_i = the volume of clean-up material "i" employed, in gallons per day.

C_i = the volatile organic compound content, in pounds per gallon, from clean-up material "i".

For acetone, $C_i = 0$ lbs VOC/gallon acetone.

For superflush, $C_i = 0$ lbs VOC/gallon superflush.

g) Miscellaneous Requirements

(1) None



2. P002, Closed-molding operation using casting resin

Resin casting operation with no controls

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. b)(1)a., b)(2)a., b)(2)b., c)(1), d)(2), and e)(1).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) [Synthetic Minor to avoid Title V and 40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-5935)]	The maximum annual combined styrene emissions generated by emissions units P001 and P002 shall not exceed 9.7 tons per year, based on a rolling, 365-day summation of emissions See b)(2)a and b)(2)b.
b.	OAC rule 3745-31-05(A)(3)	Recordkeeping requirements in section d)
c.	OAC rule 3745-21-07	Exempt. See b)(2)c.
d.	OAC rule 3745-21-25(A)(2)(e)	See b)(2)d. and d)(3)

(2) Additional Terms and Conditions

a. By request of the applicant and pursuant to OAC rule 3745-31-05(D), the Terms & Conditions listed in term a)(2)a. are federally enforceable and incorporated into this permit to limit the combined potential to emit for this emissions unit (P002) in combination with emissions unit P001.

The federally enforceable styrene limitation is based on the maximum styrene content restriction in term (2)b. and the maximum annual material usage in term c)(1) of this permit, and is established for the purposes of avoiding Title V applicability.

- b. The styrene content of each gel coat for P001 shall not exceed 43%, by weight, as employed.

The styrene content of each casting resin for P002 shall not exceed 35%, by weight, as employed.

- c. Upon achieving compliance with rule 3745-21-25 of the Ohio Administrative Code (OAC), the reinforced plastic composites production operations at the facility are not required to meet the requirements of OAC rule 3745-21-07.
- d. With the maximum styrene content restriction in (2)b., the maximum annual material usage restriction in c)(1), and the cleaning material restrictions in c)(2), the facility has a potential to emit for VOC of less than 10.0 tons per year for all reinforced plastic composites production operations, combined, and is excluded from the requirements of OAC rule 3745-21-25, except for the recordkeeping requirements specified in d)(3) of this permit.
- e. With the maximum styrene content restriction in (2)b. and maximum annual material usage restriction in c)(1), the facility is not a major source of hazardous air pollutant (HAP) emissions for styrene monomer, and, therefore, is not subject to 40 CFR Part 63, Subpart WWWW – National Emissions Standards for Hazardous Air Pollutants (NESHAP): Reinforced Plastic Composites Production.

c) **Operational Restrictions**

- (1) The maximum annual usage of casting resin for P002 shall not exceed 700,950 pounds, based upon a rolling, 12-month summation, and the maximum annual usage of gel coat for P001 shall not exceed 48,000 pounds based upon a rolling, 12-month summation.
- (2) Only acetone, super flush (consisting of 29% dimethyl glutarate, 9% oxybispropanolmethylether, 9% dimethyl adipate and 9% dimethyl succinate, by volume), and/or any 0% VOC containing material shall be used as cleanup materials in this emissions unit. These cleanup materials shall not be photochemically reactive materials.

d) **Monitoring and/or Record Keeping Requirements**

- (1) The permittee shall collect and record the following information for each day for emissions unit P002:
- a. the name and company identification number of each casting resin employed;
- b. the number of pounds of each casting resin used;
- c. the percent styrene of each casting resin employed;

- d. the number of gallons of clean-up materials (acetone, super flush, etc) employed;
- e. the volatile organic compound content of clean-up materials (acetone, super flush, etc), in pounds per gallon;
- f. the total volatile organic compound emission rate for all casting resins employed, in pounds per day as calculated per the method in section f)(1)a.;
- g. the total styrene emission rate for all casting resins, in pounds per day, as calculated per the method in section f)(1)a.;
- h. the total volatile organic compound emission rate for all clean-up materials (acetone, super flush, etc) employed, in pounds per day as calculated per the method in section f)(1)b; and
- i. the total number of hours the emissions unit was in operation.

Note: The coating information must be for the coatings as employed, including any thinning solvents added before their use.

- (2) The permittee shall collect and record the following information each day for emissions units P001 and P002 combined:
 - a. the total combined styrene emission rate for all casting resins and gel coats employed as calculated per the method in section f)(1)a.;
 - b. the total combined styrene emission rate for all casting resins and gel coats employed, in pounds per day; and
 - c. the total combined rolling, 365-day summation of styrene emissions, in tons per year.
 - (3) The permittee shall maintain an up-to-date record of the potential to emit for VOC from all reinforced plastic composites production operations, and shall employ emission factors or emission estimates in the calculation of the potential to emit that meet the requirements of OAC rule 3745-21-25(E).
 - (4) For further information regarding records retention requirements, see Part A: Standard Terms and Conditions in this permit.
- e) Reporting Requirements
- (1) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. identify all exceedances of the 35%, by weight, styrene content limitation for the casting resins employed in this emissions unit;

- ii. identify all exceedances of the rolling, 12-month restriction on the casting resin usage in this emissions unit; and
- iii. identify all exceedances of the rolling, 365-day styrene emission limitation for emissions units P001 and P002 combined.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (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 PER shall additionally identify the following:
 - a. any monthly record showing the use of any cleanup material other than those listed in term c)(2) above
 - (4) For further information regarding the reporting requirements, see Part A: Standard Terms and Conditions in this permit.
- 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. Emissions Limitation:

The maximum annual combined styrene emissions generated by emissions units P001 and P002 shall not exceed 9.7 tons per year, based on a rolling, 365-day summation of emissions.

Applicable Compliance Method:



To calculate emissions from gel coat operations from P001, the permittee shall employ the following formula:

$$E_{(\text{gel coat})} = \text{summation of } (W_i \times EF_i)$$

Where:

$E_{(\text{gel coat})}$ = the daily styrene emissions from all gel coat, in pounds per day.

i = subscript denoting a specific gel coat employed.

W_i = the weight of gel coat "i" employed, in pounds per day

EF_i = the emission factor for styrene emissions* from gel coat "i" employed, in pounds per day.

For gel coat at 43% styrene, $EF_i = 0.25$ lbs styrene per pound gel coat.

*Reference: [68 FR 19402, Apr. 21, 2003, as amended at 70 FR 50129, Aug. 25, 2005]

$EF = ((1.03646 \times \%HAP) - 0.195) = \text{lbs styrene per lb of material;}$
emission factor equation for open molding operation - atomized spray gel coat application

Table 1 to Subpart WWWW of Part 63—Equations To Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams

To calculate emissions from casting resins for P002, the permittee shall employ the following formula from AP-42 4.4 02/07**:

The permittee uses a casting resin containing a maximum of 35% styrene, by weight. The emission factor is 0.03; therefore:

$$\text{pounds resin/day} \times 0.35 \times 0.03 = \text{pounds styrene/day}$$

**This emission factor is based on EPA AP-42 Section 4.4, dated 02/07, Table 4.4-2 Emission Factors For Uncontrolled Polyester Resin Product Fabrication Processes using the maximum factor in the range for Marble Casting Resin.

To calculate total combined emissions from P001 and P002, the permittee shall employ the following formula:

$$\text{Combined Emissions} = \text{P001 emissions} + \text{P002 emissions}$$

Note: The equations above can be used for calculating VOC emissions by inserting the % VOC in place of the % styrene.

Compliance shall be based upon the record keeping requirements in section d)(1) and d)(2).



b. Recordkeeping Requirement:

The total volatile organic compound emission rate for all clean-up materials (acetone, super flush, etc) employed (term d)(1)h. above).

Applicable Compliance Method:

To calculate the volatile organic compound (VOC) emission rate of clean-up material, the permittee shall employ the following formula:

$$E_{(\text{clean-up material})} = \text{summation of } (V_i \times C_i)$$

Where:

$E_{(\text{clean-up material})}$ = the daily volatile organic compound emissions from all clean-up materials employed, in pounds per day.

i = subscript denoting a specific clean-up material (acetone, superflush, etc) employed.

V_i = the volume of clean-up material "i" employed, in gallons per day.

C_i = the volatile organic compound content, in pounds per gallon, from clean-up material "i".

For acetone, $C_i = 0$ lbs VOC/gallon acetone.

For superflush, $C_i = 0$ lbs VOC/gallon superflush.

g) Miscellaneous Requirements

(1) None