

Facility ID: 1409040931 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1409040931 Emissions Unit ID: P001 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
marble casting operation	OAC rule 3745-31-05(A)(3) (PTI 14-05071)	0.73 lb OC/hr from resin 13.1 lbs OC/day from resin 8.86 lbs OC/day from cleanup material 2.4 TPY OC from resin 1.1 TPY OC from cleanup material

See A.2.
The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-21-07(G)(2)

2. Additional Terms and Conditions

- (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations established in this permit and compliance with the air toxics policy. The hourly and daily emission limitations outlined are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly or daily records are required to demonstrate compliance with these limits.

B. Operational Restrictions

1. The styrene content of the polyester resins employed shall not exceed 29 % by weight.
2. The OC content of each cleanup material employed shall not exceed 8.86 pounds of OC per gallon of cleanup material.
3. The amount of cleanup material used shall not exceed 1 gallon/day and 250 gallons/year.
4. The amount of polyester resin employed shall not exceed 276 tons per year.
5. The use of photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) is prohibited.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month:
 - a. The company identification for each liquid organic material (polyester resin) employed.
 - b. The number of pounds of each polyester resin employed.
 - c. The number of gallons of each cleanup material employed.
 - d. The styrene content percentage of each polyester resin employed.
 - e. The OC content of each cleanup material, in pounds per gallon.
 - f. The total organic compound emission rate for polyester resins, in pounds of OC emitted per month. To determine emissions from resins used for marble casting, multiply the pounds used by 0.03** then times the styrene content/100.

** Emission Factor taken from AP-42 Fifth Edition, January 1995, Table 4.4.-2 Emission Factors for

Uncontrolled Polyester Resin Product Fabrication Processes

- g. The total OC emission rate for all the resins and cleanup materials, in tons per month. The sum of $[f + (c * e)]/2000$.
 - h. A record of cleanup material employed in this emissions unit, indicating whether or not the cleanup material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).
2. The permit to install for this emissions unit P001 was evaluated based on the actual materials (typically coatings and cleanup 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 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 85,000

Maximum Hourly Emission Rate (lbs/hr): 0.73

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 664.3

MAGLC (ug/m3): 2024

Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxics 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 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 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 with the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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. When the 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.

D. Reporting Requirements

- 1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each month during which the OC content of the cleanup materials employed exceeded 8.86 pounds of OC per gallon, and the actual OC content of the non-compliant cleanup materials employed.
 - b. An identification of each month during which the styrene content of polyester resins employed exceeded 29 % by weight, and the actual styrene content of the non-compliant polyester resins employed.
 - c. An identification of each month during which cleanup materials were employed that were photochemically reactive, as defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall submit an annual report which specifies any exceedances of the annual resin and/or cleanup material usage limitations as well as any exceedances of the total organic compound emission limitations from this emissions unit. These reports shall be submitted by January 31 of each year and cover the previous calendar year.
- 3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the OC emission limitations specified in terms A.1. of this permit shall be determined by the information collected and recorded in term C.1. of this permit.
2. Formulation data or USEPA method 24 (for coatings) shall be used to determine the OC contents of the liquid organic materials.
3. Compliance with the styrene content limit of the resin and OC content of the cleanup materials in terms B.1 and B.2 shall be determined by the record keeping in term C.1.
4. Compliance with the material usage restrictions in terms B.3 and B.4 shall be demonstrated by the recordkeeping in term C.1.

F. Miscellaneous Requirements

None