

Facility ID: 0616010085 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: 0616010085 Emissions Unit ID: R001 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>   |
|---|---|--|
| R001 - Spraybake Downdraft Paint Booth        | OAC rule 3745-31-05 (A)(3)<br>PTI# 06-06084 (3/15/00) | Maximum daily coating usage shall be less than 10 gallons of coating in any one day<br>12.5 TPY VOC<br>See B.1 below.            |
|   |   | Compliance with the Air Toxics Policy  |
|   |   | Requirements of this rule also include compliance with the requirements of OAC rule 3745-17-11(B)(1) and OAC rule 3745-17-07(A). |
|   | OAC rule 3745-21-09(U)(1)                             | Exempt from the emission limitation(s) in OAC rule 3745-21-09(U)(1) pursuant to OAC rule 3745-21-09(U)(2)(e)(iii).               |
|   | OAC rule 3745-17-11(B)(1) (Table 1)                   | Particulate emissions shall not exceed 0.551 lb/hr. (2.41 TPY)   |
|   | OAC rule 3745-17-07(A)                                | Visible emissions shall not exceed 20% opacity as a six-minute average, except as specified by rule                              |

2. **Additional Terms and Conditions**
  - (a) None

**B. Operational Restrictions**

1. The permittee shall use the water wash and filter on the emissions unit's exhaust outlet when the emissions unit is in operation.

**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for the coating line:
  - a. The name and identification number of each coating employed.
  - b. The volume, in gallons, of each coating employed.
  - c. The total volume, in gallons, of all of the coatings employed
2. The permittee shall collect and record the following information for the purpose of determining annual VOC emissions:
  - a. The name and identification of each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The VOC content of each coating, as applied, in pounds per gallon.
  - e. The total VOC emissions from all coatings and cleanup materials employed, in pounds or tons.

3. The permit to install for this emissions unit, R001, 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene

TLV (mg/m<sup>3</sup>): 188,000 ug/m<sup>3</sup>  
Maximum Hourly Emission Rate (lbs/hr): 1.92 lbs/hr

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m<sup>3</sup>): 23.23 ug/m<sup>3</sup>

MAGLC (ug/m<sup>3</sup>): 4,476 ug/m<sup>3</sup>

Physical changes to or changes 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 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 still 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 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(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.

4. 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.

#### D. Reporting Requirements

1. The permittee shall notify the Ohio EPA Southeast District Office, in writing, of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

#### E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 

Emission Limitation:  
maximum daily coating usage shall be less than 10 gallons of coating in any one day;

Applicable Compliance Method:  
Compliance with these emission limitations shall be determined based upon the records required pursuant to Section C.

Emission Limitation:  
VOC emissions shall not exceed 12.5 tons/yr.

Applicable Compliance Method:  
Compliance with these emission limitations shall be determined based upon the records required pursuant to Section C. Formulation data or USEPA Method 24 shall be used to determine the VOC content of the coatings and cleanup materials.

Emission Limitation:  
Particulate emissions shall not exceed 0.551 lb/hr.

Applicable Compliance Method:  
To determine the actual worst case emission rate for particulates, the following equation shall be used:

$$E = (M) * (1-TE) * (1-CE)$$

where:

E = particulate matter emission rate (lb/hr),

M = maximum coating solids usage rate (lb/hr),

TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.65 for HVLP spray guns),

CE = control efficiency of the control equipment (90% for panel filters; assume 90% for water wash unless manufacturer's data available). If more than one piece of control equipment is used in series, the equation should be multiplied by additional (1-CE) terms for each additional piece of equipment.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

Emission Limitation:

Particulate emissions shall not exceed 2.41 TPY

Applicable Compliance Method:

Compliance with the TPY PM emissions limitation shall be determined by multiplying the pound per hour emission rate by 8760 hours per year and 0.0005 tons per pound.

Emission Limitation:

20% opacity as a six-minute average, except as specified by rule

Applicable Compliance Method:

Compliance with the 20% opacity limit shall be determined using Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

Compliance with the air toxics requirements have been determined by modeling the maximum total emission rate for this emissions unit to determine the predicted 1-hour maximum ground-level concentration at the fenceline. Therefore, the hourly emission rates can not be exceeded under current conditions. As required above and by OAC rule 3745-31-02, any change in the coatings used or in the operation of the emissions unit which would increase the emission rate of any individual air toxic would require a new permit to install.

F. **Miscellaneous Requirements**

1. None