

Facility ID: 1431404180 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: 1431404180 Emissions Unit ID: K001 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>
K001 - Paint Spray Booth for Metal Furniture	OAC rule 3745-31-05(A)(3) (PTI 14-05715)	Volatile organic compound (VOC) emissions shall not exceed 14.95 pounds per day, excluding cleanup.  Volatile organic compound emissions shall not exceed 3.22 tons per year, including cleanup.  The requirements of this rule also include compliance with OAC rule 3745-21-09(I)(3)(a) and 40 CFR 60.310(c).
	OAC rule 3745-21-09(I)(3)(a)  40 CFR 60 Subpart EE	See terms and conditions A.2.b, A.2.c, B.1, B.2 and B.3. Exempt. VOC emissions are limited to less than 15 lbs/day in term and condition A.1 above. Exempt. See term and condition B.2.

2. **Additional Terms and Conditions**
  - (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the VOC content limitations, coating and cleanup material usage limitations and the mass emission limitations.  
 The maximum VOC content of each coating employed in this emissions unit shall not exceed 4.53 pounds of VOC per gallon, as applied.  
 The maximum VOC content of each cleanup material employed in this emissions unit shall not exceed 7.33 pounds of VOC per gallon, as applied.

**B. Operational Restrictions**

1. The maximum daily coating usage for this emissions unit shall not exceed 3.3 gallons per day, as applied.
2. The maximum annual coating usage shall not exceed 1000 gallons per year, as applied.
3. The maximum annual cleanup material usage for this emissions unit shall not exceed 260 gallons per year, as applied.

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

1. The permittee shall collect and record the following information each day for all metal furniture coating lines at the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The mass of VOC per volume (excluding water and exempt solvents) and the volume of each coating (excluding water and exempt solvents), as applied.
  - c. The total VOC emissions from the coatings employed, as calculated using the following equation:

$$T = A_1 B_1 + A_2 B_2 + \dots + A_n B_n$$

where:

T = Total VOC emissions from the combined coating lines before the application of capture systems and control devices, in units of pounds per day;

n = Number of different coatings applied in the coating lines at the facility;

i = Subscript denoting an individual coating;

A<sub>i</sub> = Mass of VOC per volume of coating (i) (excluding water and exempt solvents), as applied, in units of pounds VOC per gallon; and

B<sub>i</sub> = Volume of coating (i) (excluding water and exempt solvents), as applied, in units of gallons per day.

2. The permittee shall collect and record the following information each day for this emissions unit:
  - a. the name and identification number of each coating;
  - b. the volume, in gallons, of each coating employed (as applied);
  - c. the total volume, in gallons, of all of the coatings employed (as applied);
  - d. the VOC content of each coating employed, in pounds VOC per gallon of coating (as applied); and
  - e. the total daily VOC emissions, in pounds (b x d).
3. The permittee shall collect and record the following information each month for this emissions unit:
  - a. the name and identification number of each cleanup material;
  - b. the volume, in gallons, of each cleanup material employed;
  - c. the total volume, in gallons, of all cleanup materials employed;
  - d. the VOC content of each cleanup material employed, in pounds VOC per gallon of cleanup material; and
  - e. the total monthly VOC emissions, in pounds (b x d).
4. The permittee shall maintain annual records of the total VOC emissions, in tons (summation of the emissions from term C.2.e plus the emissions from term C.3.e divided by 2000 pounds per ton.
5. The permit to install for this emissions unit K001 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: xylene

TLV (ug/m<sup>3</sup>): 434,192

Maximum Hourly Emission Rate (lbs/hr): 6.81

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2953

MAGLC (ug/m<sup>3</sup>): 10,338

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 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 air 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.

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 notify the Hamilton County Department of Environmental Services in writing of any daily record showing that the combined VOC emissions (excluding emissions from cleanup materials) from all of the metal furniture coating lines at the facility are equal to or greater than 15 pounds of VOC per day (before add-on controls). The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.
2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any daily record showing that emissions unit K001 employs more than the applicable maximum daily coating usage limit in term A.2.d and/or exceeds the coating VOC content limitation outlined in term A.2.b. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any monthly record showing that emissions unit K001 employed cleanup materials that exceeded the applicable maximum VOC content limit outlined in term A.2.c. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the exceedance(s) occurs.
4. The permittee shall submit annual reports which specify the annual coating and cleanup material usage and 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 and VOC content limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
Volatile organic compound (VOC) emissions shall not exceed 14.95 pounds per day, excluding cleanup.  
  
Applicable Compliance Method:  
The daily emission limitation specified above is determined by multiplying the maximum daily coating usage limit outlined in term B.1 by the maximum coating VOC content limitation in term A.2.b.
  - b. Emission Limitations:  
Volatile organic compound emissions shall not exceed 3.22 tons per year, including cleanup.  
  
Applicable Compliance Method:  
Compliance with the above emission limitations may be demonstrated by the record keeping requirements as specified in term and condition C.4.
  - c. Emission Limitation:  
4.53 pounds of VOC per gallon for coating (as applied); and  
7.33 pounds of VOC per gallon for cleanup materials.  
  
Applicable Compliance Method:  
USEPA methods 24 and 24A shall be used to determine the VOC content for (a) coatings and (b) flexographic and rotogravure printing lines and related coatings, respectively. If, pursuant 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.
2. Compliance with the coating usage limitations in terms and conditions B.1 and B.2 shall be determined by the record keeping requirements as specified in term and condition C.1 and C.2.
3. Compliance with the cleanup material usage limitation in terms and conditions B.3 shall be determined by the record keeping requirements as specified in term and condition C.3.

**F. Miscellaneous Requirements**

1. None