Facility ID: 0679000305 Issuance type: Final State Permit To Operate

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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: 0679000305 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
Paint booth # 1	OAC rule 3745-31-05(A)(3) PTI # 06-07645	Emissions of volatile organic compounds (VOC) shall not exceed 14.0 lb/hr. Particulate emissions shall not exceed 2.5 tons per year. Total emissions of VOC from K001 and K002, combined, shall not exceed 58.4 tons during any 12-month period. The requirements of this rule also include compliance with the requirements of OAC rules 3745-35-07(B), 3745-21-09 (U)(1)(d), 3745-17-11(B) and 3745-17-07 (A).
	OAC rule 3745-35-07(B)	Emissions of any single hazardous air pollutant (HAP) from this facility shall be less than 9.9 tons as a rolling, 12-month summation. Emissions of any combination of HAPs from this facility shall be less than 18.4 tons as a rolling, 12-month summation.
	OAC rule 3745-21-09 (U)(1)(d)	The VOC content of all metal coatings employed shall not exceed 3.5 pounds VOC per gallon (excluding water and exempt solvents) as a daily, volume-weighted average.
	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 0.551 pound per hour.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six minute average, at any time.

2. **Additional Terms and Conditions**

   (a) None

B. **Operational Restrictions**

1. The total maximum annual coating usage for emissions units K001 and K002, combined, shall not exceed 26,900 gallons, based upon a rolling, 12-month summation.

2. The total maximum annual usage of cleanup solvent for emissions units K001 and K002, combined, shall not exceed 3000 gallons, based upon a rolling, 12-month summation.

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

1. The permittee shall collect and record the following information for each day during which the coating line uses any coating which exceeds 3.5 pounds VOC per gallon:

   a. The name and identification number of each metal coating, as applied.

   b. The VOC content (excluding water and exempt solvents) and the number of gallons (excluding water and exempt solvents) of each metal coating, as applied.

   c. The daily volume-weighted average VOC content of all metal coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2.

2. The permittee shall collect and record the following information each month for all coatings and cleanup materials employed in emissions units K001 and K002, combined:

   a. the name and identification of each coating and cleanup material;

   b. the number of gallons of coatings;

   c. the number of gallons of cleanup materials;

   d. the VOC content, as applied, in pounds per gallon;

   e. the individual HAP content, for each HAP, in pounds per gallon;

   f. total HAP content, in pounds per gallon;

   g. the total VOC emissions from all coatings and cleanup materials employed [the sum of (b. times d.) for all coatings plus (c. times d.) for all cleanup materials] divided by 2000, in tons;

   h. the individual HAP emissions from all coatings and cleanup materials employed [the sum of (b. times e.), for each HAP in all coatings plus (c. times e.) for each HAP in all cleanup materials] divided by 2000, in tons;

   i. the total HAP emissions from all coatings and cleanup materials employed [the sum of (b. times f.) for all coatings plus (c. times f.) for all cleanup materials] divided by 2000, in tons;

   j. the rolling, 12-month summation of the coating usage figures; and

   k. the rolling, 12-month summation of the cleanup material usage figures.

   The permittee has sufficient monthly records of coatings usage to begin calculating the rolling, 12-month summation upon final issuance of this permit.

3. 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: methyl isobutyl ketone

   TLV (mg/m3): 204.83

   Maximum Hourly Emission Rate (lbs/hr): 3.96

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 550.2

   MAGLC (ug/m3): 4877

4. 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.

5. 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 Southeast District Office in writing of any daily record showing that the daily volume-weighted average VOC content exceeds the applicable limitation. The notification shall include a copy of such record and shall be sent to the Southeast District Office within 45 days after the exceedance occurs.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month coating or cleanup materials usage limitations. These reports shall be sent to the Southeast District Office within 45 days after the exceedance occurs.

3. The permittee shall submit annual reports which include the following information:

a. the total emissions of VOC from emissions units K001 and K002, combined, in tons;

b. the total emissions of each individual HAP from emissions units K001 and K002, combined, in tons; and

c. the total emissions of all HAP from emissions units K001 and K002, combined, in tons.

These reports shall be submitted by January 31 of each year and shall include information for each 12-month summation recorded during the previous calendar year.

E. **Testing Requirements**

1. Compliance Methods Requirements: Compliance with the emission limitation(s) established in this permit shall be determined in accordance with the following method(s):
Emission Limitation:

Emissions of volatile organic compounds (VOC) shall not exceed 14.0 lb/hr.

Applicable Compliance Method:

The emission limitations represent the maximum potential of the emissions unit as determined by multiplying the maximum coating VOC content by the maximum usage rate for that coating.
(4 gal/hr)(3.5 lbs/gal) = 14.0 lbs/hr
Emission Limitation:

Total emissions of VOC from K001 and K002, combined, shall not exceed 58.4 tons during any 12-month period.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections C.1 and C.2 of this permit. Initial compliance was determined by multiplying the maximum coating VOC content by the operational limit of 26,900 gallons per year and adding the projected maximum cleanup solvent usage multiplied by the solvent density.
[(3.5 lbs/gal)(26,900 gal/yr) + (3000 gal/yr)(7.5 lb/gal)](0.0005 ton/lb) = 58.3 tons/yr
Emission Limitation:

Emissions of any single hazardous air pollutant (HAP) from this facility shall be less than 9.9 tons as a rolling, 12-month summation.
Emissions of any combination of HAPs from this facility shall be less than 18.4 tons as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section C.2 of this permit.
Emission Limitation:

The VOC content of all metal coatings employed shall not exceed 3.5 pounds VOC per gallon (excluding water and exempt solvents) as a daily, volume-weighted average.

Applicable Compliance Method:

Compliance with the VOC content limitation of 3.5 pounds VOC per gallon of coating shall be based upon the record keeping specified in Sections C.1 and C.2. of this permit.
Formulation data or USEPA Method 24 shall be used to determine the organic compound or VOC content of the coatings and cleanup materials.
Emission Limitation:

Particulate emissions shall not exceed 0.551 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by the following equation:
(max usage rate)(coating density)(solids fraction)(1-transfer efficiency)(1-control efficiency)
Currently: (4 gal/hr)(15.69 lbs/gal)(0.59 solids)(0.50 transfer)(0.02 control) = 0.37 lb/hr
Emission Limitation:

Particulate emissions shall not exceed 2.5 tons per year.

Applicable Compliance Method:

Compliance shall be determined by the summation of the results of the following equation for each coating: (annual usage)(coating density)(solids fraction)(1-transfer efficiency)(1-control efficiency)(0.0005 ton/lb) = TPY
Emission Limitation:

Visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average, except for a period of six consecutive minutes in any sixty minutes. Visible particulate emissions shall not exceed sixty percent opacity, as a six minute average, at any time.

Applicable Compliance Method:

If required, compliance with these emission limits shall be demonstrated in accordance with 40 CFR 60 Appendix A, Method 9.

F. **Miscellaneous Requirements**

1. None