

Facility ID: 1431154016 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: 1431154016 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-miscellaneous metal parts paint operation (modification)	OAC rule 3745-31-05(A)(3) (PTI 14-05213)	Volatile Organic Compound (VOC) emissions shall not exceed 112 pounds per hour, from coatings (excluding cleanup materials).  See term B.1.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1) (c) and OAC rule 3745-31-05(C).
	OAC rule 3745-21-09(U)(1)(c) OAC rule 3745-31-05(C)	See term A.2.b. Volatile Organic Compound (VOC) emissions shall not exceed 40 tons per year, based upon a rolling, 12-month summation.  See terms A.2.c, A.2.d, B.2 and B.3.

**2. Additional Terms and Conditions**

- (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by VOC content limitations, coating and cleanup material usage limitations.
  - The VOC content as applied, of each coating employed shall not exceed 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents based upon a daily volume weighted average.
  - The VOC content as applied, of each coating employed shall not exceed 2.9 pounds of VOC per gallon, excluding water and exempt solvents as a volume weighted average, based upon a rolling 12-month summation, of all the coatings employed. Compliance shall be determined by the methods outlined in the Ohio Administrative Code (OAC) rule 3745-21-10(B)(9).
  - The VOC content of each cleanup material employed shall not exceed 6.42 pounds of VOC per gallon of cleanup material.
  - The hourly emission limitation outlined in this permit is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limitation.

**B. Operational Restrictions**

1. The maximum daily hours of coating application shall not exceed 22 hours per day. This limitation ensures compliance with Ohio's Air Toxic Policy.
2. The maximum annual coating usage for this emissions unit shall not exceed 24,482 gallons, based upon a rolling, 12-month summation of the coating usage figures, excluding water and exempt solvents.
3. The maximum annual cleanup material usage for this emissions unit shall not exceed 1406 gallons, based upon a rolling, 12-month summation of the cleanup material usage figures.

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

1. The permittee shall maintain daily records indicating whether it has complied with the limitation in B.1.
2. When employing coatings with a VOC content greater than 3.5 pounds of VOC per gallon of coating, the permittee shall collect and record the following information on a daily basis for the purpose of determining the daily volume weighted average VOC content for all coatings employed in this emissions unit:

- a. The name and identification number of each coating, as applied.
  - b. The VOC content (excluding water and exempt solvents) in pounds of VOC per gallon of coating for each coating employed.
  - c. The number of gallons (excluding water and exempt solvents) of each coating, as applied.
  - d. The daily volume-weighted average VOC content, as applied, for each coating. The daily volume weighted average shall be calculated by multiplying the VOC content in line (b) by the usage amount contained in line (c) for each coating employed during that day. The summation of these values should then be divided by the total gallons of coatings employed during that day.
3. The permittee shall collect and record the following information on a monthly basis for the purpose of determining the monthly volume weighted average VOC content for all coatings employed in this emissions unit:
- a. The name and identification number of each coating, as applied.
  - b. The VOC content (excluding water and exempt solvents) in pounds of VOC per gallon of coating for each coating employed.
  - c. The number of gallons (excluding water and exempt solvents) of each coating, as applied
  - d. The monthly volume-weighted average VOC content, as applied, for each coating. The monthly volume weighted average shall be calculated by multiplying the VOC content in line (b) by the usage amount contained in line (c) for each coating employed during that month. The summation of these values should then be divided by the total gallons of coatings employed during that month.
4. The permittee shall maintain monthly records of the following information:
- a. The rolling, 12-month summation of the coating usage figures.
  - b. The rolling, 12-month summation of the cleanup material usage figures.
  - c. The VOC content of each cleanup material.
  - d. The total VOC emissions from all coatings and cleanup materials, in pounds or tons.
  - e. The total rolling, 12-month summation of VOC emissions, in pounds or tons.
5. The permit to install for this emissions unit K001 was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: mineral spirits

TLV (ug/m3): 572,597

Maximum Hourly Emission Rate (lbs/hr): 56.49

Predicted 1-Hour Maximum Ground-Level  
Concentration at fence line of 79 meters (ug/m3): 14278.9

MAGLC\* (ug/m3):14872.65

\* The MAGLC is based upon a maximum coating application rate of 22 hours per day(TLV/38.5). 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 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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) meet(s) the definition of a "modification"

under other provisions of the rule, 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 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 the 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 Hamilton County Department of Environmental Services in writing of any record showing the use of noncomplying coatings and/or cleanup materials (i.e., for VOC contents) in this emissions unit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record showing that the daily hours of coating application exceeded the limit set forth in term B.1. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
3. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. The reports shall be sent to the Hamilton County Department of Environmental Services by January 31 of each year.
4. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of total coating and cleanup material usages in gallons and total VOC emissions in tons for each calendar month. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

**E. Testing Requirements**

1. Emission Limitation:
 

Volatile Organic Compound (VOC) emissions shall not exceed 112 pounds per hour, from coatings (excluding cleanup materials).

Applicable Compliance Method:

The emission limitation was calculated with the following equation:

$$32 \text{ gallons of coating per hour ( hourly PTE) } \times 3.5 \text{ lbs of VOC/gallon of coating} = 112 \text{ pounds of VOC per hour.}$$
2. Compliance with the VOC content limitations and usage limitations shall be based upon the record keeping requirements as specified in terms C.2, C.3 and C.4.
3. Compliance with the annual VOC emission limitation and the rolling, 12-month VOC emission limitation shall be based upon the recordkeeping requirements as specified in term C.4.
4. Compliance with hours of coating application limitation shall be demonstrated by the recordkeeping requirements as specified in term C.1.
5. 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 to 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.

**F. Miscellaneous Requirements**

1. None