

Facility ID: 1413020443 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: 1413020443 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>
miscellaneous metal parts paint spray booth	OAC rule 3745-31-05 (PTI 14-4630)	59.85 lbs/day and 3.7 tons per year (TPY) of volatile organic compounds (VOC) from coating and cleanup material usage  0.263 lb/hr and 1.2 tons per year (TPY) of particulate emissions (PE)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 and 3745-21-09(U).
	OAC rule 3745-21-09(U)(1)(c)	See term and condition A.2. below.
	OAC rule 3745-17-11(B)(1)	The permittee shall not employ any coating with a VOC content greater than 3.5 pounds per gallon, excluding water and exempt solvents, as applied.
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See term and condition A.2.b below.

2. **Additional Terms and Conditions**
  - (a) The permittee shall not employ any cleanup material with a VOC content greater than 7.35 pounds of VOC per gallon. Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule. The daily VOC emission and coating and cleanup material usage limitations are based upon the emissions unit's potential to emit. Therefore, no daily records are required to demonstrate compliance with these limits.

**B. Operational Restrictions**

1. The maximum coating usage shall not exceed 15 gallons per day and 1560 gallons per year, excluding water and exempt solvents.
2. The maximum cleanup material usage shall not exceed 1 gallon per day and 260 gallons per year.

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

1. The permittee shall collect and record the following information for each month:
  - a. The name and identification number of each coating and cleanup material employed;
  - b. The number of gallons, of each coating employed, excluding water and exempt solvents;
  - c. The number of gallons, of each cleanup material employed;
  - d. The VOC content of each coating, in pounds per gallon, excluding water and exempt solvents, as applied;

- e. The VOC content of each cleanup material, in pounds per gallon; and
  - f. The total VOC emissions for all coatings and cleanup materials employed, in tons {summation of [(b) x (d) for each coating] divided by 2,000 plus summation of [(c) x (e) for each cleanup material] divided by 2,000}.
2. The permittee shall collect and record the following information for each calendar year:
- a. the total VOC emissions from all coatings and cleanup materials, in tons (summation of C.1.f for each month);
  - b. the total number of gallons of coatings employed, excluding water and exempt solvents (summation of C.1.b for each month); and
  - c. the total number of gallons of cleanup materials employed (summation of C.1.c for each month).
3. Emissions Unit ID: K001

The permit to install for this emissions unit 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. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxics 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: Cyclohexanone

TLV (ug/m3): 100,000

Maximum Hourly Emission Rate (lbs/hr): 0.15

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 91.7

MAGLC (ug/m3): 2,381

Pollutant: Methyl n-Amyl Ketone

TLV (ug/m3): 233,000

Maximum Hourly Emission Rate (lbs/hr): 1.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 916.9

MAGLC (ug/m3): 5,548

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 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 Toxics Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxics Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxics Policy" include the following:

a. changes in the composition of the materials used (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 Toxics Policy" will be satisfied with the above changes, 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 Toxics 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 Toxics 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 Toxics Policy" for the change.

**D. Reporting Requirements**

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly

record showing any use of noncomplying coatings or cleanup materials (i.e., for VOC contents). 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 submit annual reports that summarize the annual coating and cleanup material usages and VOC emissions. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

**E. Testing Requirements**

1. a. VOC Content Limitations: 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, and 7.35 pounds of VOC per gallon of cleanup material

Applicable Compliance Method: Compliance shall be determined by the record keeping performed pursuant to Section C.1. U.S. EPA Method 24 or 24A shall be used to determine the VOC content for any coating employed in this emissions unit. If, pursuant to section 4.3 of Method 24, 40 CFR, Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A. Formulation data or U.S. EPA Method 24 or 24A shall be used to determine the VOC content of any cleaning material.

- b. Emission Limitation: 3.7 TPY of VOC from coating and cleanup materials

Applicable Compliance Method: Compliance with annual VOC emission limit shall be determined by the record keeping requirements in Section C.2 of this permit.

- c. Emission Limitation: 59.85 lbs/day of VOC

Applicable Compliance Method: Compliance with the daily VOC emission limitation is ensured if compliance is maintained with the VOC content and material usage limitations.

- d. Material Usage Limitations: 1,560 gallons per year (excluding water and exempt solvents) of coating; 260 gallons per year of cleanup material

Applicable Compliance Method: Compliance with the usage limitations shall be based upon the record keeping requirements as specified in Section C.2.

- e. Material Usage Limitations: 15 gallons per day (excluding water and exempt solvents) of coatings; 1 gallon per day of cleanup material

Applicable Compliance Method: If required, compliance shall be determined by daily record keeping of the coating and cleanup material usages.

- f. Visible Emission Limitation: 20% opacity, as a six-minute average, except as provided by rule

Applicable Compliance Method: Compliance with the visible particulate emission limitations specified in Section A shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

- g. Particulate Emission Limitations: 0.263 pound per hour of PE and 1.2 TPY of PE.

Applicable Compliance Method: Compliance with the PE limitation shall be determined by the following equations:

(1) lbs of PE/hr = maximum weight of gallon of coating (in lbs) x maximum weight fraction of solids x maximum number of gallons of coatings per hour x 1-TE x 1-CE, where TE = fractional transfer efficiency (0.6) and CE = fractional control efficiency of particulate control device (0.90); and

(2) TPY of PE = maximum weight of gallon of coating (in lbs) x weight fraction of solids x gallons of coatings per year x 1-TE x 1-CE x 1/2000, where TE = fractional transfer efficiency (0.6) and CE = fractional control efficiency of particulate control device (0.90).

Compliance with the hourly PE limit ensures compliance with the annual PE limit.

**F. Miscellaneous Requirements**

1. None