

Facility ID: 1431484151 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: 1431484151 Emissions Unit ID: K001 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

**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 - Structural steel/miscellaneous metal paint spray operation	OAC rule 3745-31-05(A)(3) (PTI 14-05607)	Volatile organic compound (VOC) emissions shall not exceed 15.8 lbs/hour, excluding cleanup material.  Acetone emissions from cleanup material, shall not exceed 4.35 tons per year (TPY).  See term B.2.
	OAC rule 3745-31-05(C) (to avoid Title V permitting)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) and OAC rule 3745-21-09(U)(1)(c). Volatile Organic Compound (VOC) emissions shall not exceed 11.82 TPY, based upon a rolling, 12-month summation.
	OAC rule 3745-21-09(U)(1)(c) OAC rule 3745-17-11(C)	See term A.2.d and sections B.1 and B.2. See term A.2.a. See term A.2.e. See sections C.4, C.5 and C.6.

**2. Additional Terms and Conditions**

- (a) The VOC content of each coating employed in this emissions unit shall not exceed 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied. The hourly emissions limitation outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limitation. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by coating and cleanup material usage restrictions, the VOC content limitations and the emissions limitations. The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units K001 (Structural steel/miscellaneous metal paint spray operation) other de minimus air contaminant source, as defined in OAC rule 3745-15-05, and other air contaminant sources exempt from the requirement to obtain a permit-to-install pursuant to OAC rule 3745-31-03 installed subsequent to the issuance of this permit, combined, shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation. The permittee shall operate a dry particulate filter system for the coating operations in accordance with the manufacturer's recommendations, instructions, and/or operating manual, with any modifications deemed necessary by the permittee. The dry filtration system shall be employed during all periods of coating application to control particulate emissions.

**B. Operational Restrictions**

1. The maximum annual coating usage for this emissions unit shall not exceed 6750 gallons, excluding water and exempt solvents, based upon a rolling, 12-month summation of the coating usage figures.
2. The maximum annual acetone (cleanup material) usage for this emissions unit shall not exceed 1320 gallons.

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

1. The permittee shall collect and record the following information each month:
  - a. the name and identification number of each coating employed;
  - b. the volume, in gallons, of each coating, excluding water and exempt solvents employed;
  - c. the VOC content of each coating, in pounds per gallon, excluding water and exempt solvents, as applied;
  - d. the total volume, in gallons, of all coatings, excluding water and exempt solvents employed;
  - e. the rolling, 12-month summation of the coating usage figures, excluding water and exempt solvents;
  - f. the total VOC emission rate for all coatings, in pounds per month (b x c);
  - g. the rolling, 12-month summation of the total VOC emissions from all coatings, in pounds or tons;
  - h. the total volume, in gallons, of acetone (cleanup material) employed; and
  - i. the total acetone emissions from all cleanup materials, in tons.
  
2. The permittee shall collect and record the following information each month for the emissions units identified in term A.2.d:
  - a. the name and identification number of each coating, employed;
  - b. the individual Hazardous Air Pollutant (HAP) content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied;
  - c. the total combined HAP content of each coating in pounds of combined HAPs per gallon of coating, as applied [sum all the individual HAP contents from (b)];
  - d. the number of gallons of each coating employed;
  - e. the name and identification of each cleanup material employed;
  - f. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
  - g. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];
  - h. the number of gallons of each cleanup material employed;
  - i. the total individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (b) times (d) for each coating plus the sum of (f) times (h) for each cleanup material];
  - j. the total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material];
  - k. the updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons. This shall include the information for the current month and the preceeding eleven calender months; and
  - l. the updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons. This shall include the information for the current month and the preceeding eleven calender months.

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a individual emissions unit basis.
  
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 Ground-Level Concentration (MAGLC).
 

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Xylene

TLV (ug/m3): 434,192

Maximum Hourly Emission Rate (lbs/hr): 15.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 483

MAGLC (ug/m3): 10,338

Physical changes to or in the method of operation of the emissions unit after it's 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 "

4. The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry filtration system with any modifications deemed necessary by the permittee during the time period in which the dry filtration system is utilized. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

5. The permittee shall conduct periodic inspections of the dry filtration system to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee. The periodic inspections of the dry filtration system shall be performed at a frequency that is based upon the recommendation of the manufacturer, and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency. In addition to these periodic inspections, the permittee shall conduct a comprehensive inspection of the dry filtration system, not less than once each calendar year, while the emissions unit is shut down; and shall perform any needed maintenance and repair for the control device to ensure that it is operated in accordance with the manufacturer's recommendations.

The permittee shall document each inspection of the dry filtration system by maintaining a record that includes the date of the inspection, a description of each problem identified and the date it was corrected, a description of the maintenance and repairs performed, and the name of the person who performed the inspection. These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

6. In the event that the dry filtration system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee, the dry filtration system shall be expeditiously repaired or otherwise returned to operation in accordance with such requirements. The permittee shall maintain a record of those periods when the dry filtration system is not operating in accordance with such requirements. These records shall be maintained at the facility for not less than five years from the date of completion and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

#### D. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings (i.e., for VOC contents). The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

2. The permittee shall submit deviation reports which identify any exceedance of the usage limitations set forth in sections B.1 and B.2. If no exceedances occurred, the permittee shall state so in the report.

3. The permittee shall submit deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.d. If no exceedances occurred, the permittee shall state so in the report.

4. Unless otherwise noted in the above terms, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

5. The permittee shall also submit annual reports which specify the total volatile organic compound emissions and the total acetone emissions, from clean-up material use, 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:

a. Emissions Limitation:

Volatile organic compound (VOC) emissions shall not exceed 15.8 lbs/hour, excluding cleanup materials.

Applicable Compliance Method:

The emission rate was calculated by multiplying the maximum hourly coating usage rate of 4.5 gallons/hour by

the maximum VOC content of 3.5 lbs/gallon.

b. Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 11.82 TPY, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements as specified in Section C.1.

c. Emissions Limitation:

Acetone emissions from cleanup material, shall not exceed 4.35 tons per year (TPY).

Applicable Compliance Method:

The emission rate was calculated by multiplying the maximum hourly coating usage rate of 1320 gallons/year by the maximum VOC content of 6.59 lbs/gallon and converting to tons.

Compliance shall be based upon the record keeping requirements as specified in Section C.1.

d. Emission Limitation:

The VOC content of each coating employed in this emissions unit shall not exceed 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied.

Applicable Compliance Method:

USEPA methods 24 and 24A shall be used to determine the VOC content for coatings and cleanup materials 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 cleanup material, 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.

e. Operational restriction:

6750 gallons/year of coating

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements as specified in Section C.1.

f. Operational restriction:

1320 gallons per year acetone use as clean-up material

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements as specified in Section C.1.

2. Compliance with the HAP emission limitations will be determined by the record keeping requirements specified in Section C.2.

F. **Miscellaneous Requirements**

1. The following terms and conditions of this permit are federally enforceable: A, B, C.1 and C.2, D and E.