

Facility ID: 0448020075 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: 0448020075 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>
Prep area and paint spray booth that employs no more than 10 gallons of coating materials per day.	OAC rule 3745-31-05(A)(3) (PTI 04-01093 issued May 20, 1998)	Volatile organic compounds (VOC) emissions shall not exceed 80 pounds per day from coatings, and 14.6 tons per year, including both coatings and cleanup materials. Particulate emissions (PE) shall not exceed 0.551 pound per hour and 0.70 ton per year from coatings. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e)(iii), OAC rule 3745-17-11(B)(1) and OAC rule 3745-17-07(A)(1).
	OAC rule 3745-21-09(U)(2)(e)(iii) OAC rule 3745-17-11(B)(1)	See section A.2.a below. The emission limitation required by this applicable rule is equivalent to the short term particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	See section A.2.b below.

2. **Additional Terms and Conditions**
 - (a) The permittee shall not employ more than 10 gallons of coating material per day for the coating of miscellaneous metal parts. Visible PE from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating (excluding water and exempt solvents) employed, in pounds per gallon, as applied;
 - c. the number of gallons (excluding water and exempt solvents) of each coating employed; and
 - d. the total VOC emissions from all coatings employed, in pounds.
2. The permittee shall collect and record the following information for the purpose of determining annual VOC emissions:
 - a. the name and identification of each cleanup material employed;
 - b. the VOC content of each cleanup material, in pounds per gallon;

- c. the number of gallons of each cleanup material employed;
 - d. the number of gallons (excluding water and exempt solvents) of each coating employed; and
 - e. the total VOC emissions from all coatings and cleanup materials employed, in pounds or tons.
3. The permit to install for this emissions unit [04-01093] 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: toluene
TLV (ug/m3): 188,000
Maximum Daily Emission Rate (lbs/day): 53
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 39.1
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 4476

Pollutant: xylene
TLV (ug/m3): 434,000
Maximum Daily Emission Rate (lbs/day): 40
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 29.2
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 10,333

Pollutant: methyl ethyl ketone
TLV (ug/m3): 590,000
Maximum Daily Emission Rate (lbs/day): 18
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 12.9
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 14,048

Pollutant: methyl isobutyl ketone
TLV (ug/m3): 205,000
Maximum Daily Emission Rate (lbs/day): 18
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 13.4
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 4,881

Pollutant: ethyl acetate
TLV (ug/m3): 1,440,000
Maximum Daily Emission Rate (lbs/day): 27
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 19.8
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 34,286

Pollutant: n-butyl acetate
TLV (ug/m3): 713,000
Maximum Daily Emission Rate (lbs/day): 33
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 24.3
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 16,976

Pollutant: mineral spirits
TLV (ug/m3): 434,000
Maximum Daily Emission Rate (lbs/day): 78
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 56.8
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 10,333

Pollutant: 2-butoxy-ethanol
TLV (ug/m3): 121,000
Maximum Daily Emission Rate (lbs/day): 29
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 21.1
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 2,881

Pollutant: methyl n-amyl ketone
TLV (ug/m3): 233,000
Maximum Daily Emission Rate (lbs/day): 7
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 5.0
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 5,548

Pollutant: acetone
TLV (ug/m3): 1,780,000
Maximum Daily Emission Rate (lbs/day): 15
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 10.6
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 42,381

Pollutant: 1-methoxy-2-propanol acetate
TLV (ug/m3): 5,000
Maximum Daily Emission Rate (lbs/day): 36
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 16.6
Maximum Ground-Level Concentration (MAGLC) (ug/m3): 119

Pollutant: methanol
TLV (ug/m3): 262,000
Maximum Daily Emission Rate (lbs/day): 6
Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 4.6

Maximum Ground-Level Concentration (MAGLC) (ug/m3): 6,238

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 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:
- 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");
 - 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
 - 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.).
5. 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 description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - 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 Toledo Division of Environmental Services in writing of any daily record showing that the coating line employed more than the applicable maximum daily coating usage limit of 10 gallons per day. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the exceedance occurs.

E. Testing Requirements

1. Compliance with the emission limitations in sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:

The permittee shall not employ more than 10 gallons of coating material per day for the coating of miscellaneous metal parts.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section C.1.
Emission Limitation:

VOC emissions shall not exceed 80 pounds per day from coatings.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section C.1.
Emission Limitation:

14.6 tons per year of VOC emissions from coatings and cleanup materials

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section C.2.
Emission Limitation:

PE shall not exceed 0.551 pound per hour from coatings.

Applicable Compliance Method:

To determine the worst case PE rate, the following equation shall be used:

$$E = (\text{maximum coating solids usage rate, in pounds per hour}) \times (1-TE) \times (1-CE)$$

where:

$$E = \text{PE rate (lbs/hr);}$$

TE = fractional transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part

to the amount of coating solids used (0.50); and

CE = fractional control efficiency of the control equipment (0.90).

When requested by the Ohio EPA, the permittee shall demonstrate compliance with the above emissions limitation pursuant to OAC rule 3745-17-03(B)(10).
Emission Limitation:

PE shall not exceed 0.70 ton per year from coatings.

Applicable Compliance Method:

Compliance shall be determined using the following equation:

$$PE \text{ (tpy)} = TG \times SC \times (1-TE) \times (1-CE) \times (1 \text{ ton}/2000 \text{ lbs})$$

where:

PE = annual particulate emissions in tons per year;

TG = total number of gallons of coatings used in one year;

SC = maximum solid content, in pounds per gallon;

TE = fractional transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (0.50); and

CE = fractional control efficiency of the control equipment (0.90).
Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.

Applicable Compliance Method:

When requested by the Ohio EPA, compliance with the above visible emission limitation shall be determined by performing visible emission evaluations in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

2. In accordance with OAC rule 3745-21-04(B)(5), the permittee shall use USEPA Method 24 to determine the VOC contents of the coatings. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

US EPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

F. **Miscellaneous Requirements**

1. None