

Facility ID: 0448002086 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: 0448002086 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 Paint Spray Booth	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 1.6 pounds per day and 0.29 tons per year. No visible emissions. Volatile Organic Compound (VOC) emissions shall not exceed 58 pounds per day and 10.59 tons per year. The requirements established pursuant to this rule also include the requirements of OAC rule 3745-21-09(U)(1), OAC rule 3745-17-11(B)(1) and OAC rule 3745-17-07(A)(1). Particulate emissions shall not exceed 0.551 pounds per hour. see Section A.2.b.
	OAC rule 3745-17-11(B)(1)	see Section A.2.a.
	OAC rule 3745-21-09(U)(2)(e)(iii)	
	OAC rule 3745-17-07(A)(1)	

2. **Additional Terms and Conditions**
 - (a) The emission limitations specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). The permittee shall not use more than 10 gallons of coating material per day for the coating of miscellaneous metal parts.

B. Operational Restrictions

1. The permittee shall operate the paint booth fabric filter system whenever this emissions unit is in operation.

C. Monitoring and/or Record Keeping Requirements

1. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install # 04-1118, issued on March 18, 1998: Sections C.2.c, C.2.e, C.3 and C.4. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.
2. The permittee shall collect and record the following information each day for the coating line:
 - the name and identification number of each coating employed;
 - the volume, in gallons, of each coating employed;
 - the total VOC content of each coating in pounds per gallon as applied;
 - the total volume, in gallons, of all the coatings employed; and

the total VOC emissions from all the coatings employed per day, in pounds [i.e., the sum of (b) times (c) for each coating employed].

3. The permittee shall calculate and record the total annual VOC emissions from the coating of miscellaneous metal parts. [i.e., the sum of the daily VOC emission rates from the calendar year in Section C.2.e].
4. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
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: Xylene
 TLV (ug/m3): 454,000
 Maximum Hourly Emission Rate (pounds/hour): 2.8
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 780
 MAGLC (ug/m3): 10,333

Pollutant: Toluene
 TLV (ug/m3): 188,000
 Maximum Hourly Emission Rate (pounds/hour): 1.85
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 442
 MAGLC (ug/m3): 4,500

Pollutant: Ethyl Benzene
 TLV (ug/m3): 454,000
 Maximum Hourly Emission Rate (pounds/hour): 0.71
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 160
 MAGLC (ug/m3): 10,333

6. 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.).
7. 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 the 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. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install # 04-1118, issued on May 18, 1998: Section D.2, D.3 and D.4. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.
2. The permittee shall notify the Director (the Toledo Environmental Services Division) in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit of 10 gallons per day. The notification shall include a copy of such records and shall be sent to the Director (the Toledo Environmental Services Division) within 30 days after the exceedance occurs.
3. The permittee shall submit quarterly deviation reports that identify each day the VOC emissions exceeded the daily emissions limit specified above.

The quarterly deviation reports shall be submitted to the Director (the Toledo Environmental Services Division) in accordance with the General Terms and Conditions. These reports shall be submitted by January 31, April 30,

July 31, and October 31 of each year and shall cover the previous calendar quarter.

4. The permittee shall notify the Director (the Toledo Environmental Services Division) in writing of any record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Toledo Environmental Services Division) within 30 days after the event occurs.

E. Testing Requirements

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

Emissions Limitation:

10 gallons of coating per day.

Applicable Compliance Method:

Compliance shall be based upon the recordkeeping requirements specified in Section C.2.d. Limitation based on maximum coating volume specified in section A.2.b.

Emission Limitation:

58 pounds of VOC per day

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in section C.2.e. Limitation based on worst case emission rate on PTE. Compliance based upon the following equation:

$$\text{VOC}(\text{day}) = \text{VOL} \times \text{CON}(\text{VOC})$$

where:

VOC(day) = amount of VOC emissions in pounds per day, summed over all coatings used;

VOL = amount of coating used per day in gallons as specified in C.2.b (worst case is 10 gallons per day);

CON(VOC) = total VOC content of coating in pounds per gallon as specified in C.2.c (worst case is 5.8 pounds per gallon)

Emission Limitation

10.59 tons VOC per year

Applicable Compliance Method:

The annual VOC rate shall be determined in accordance with the record keeping requirements specified in Section C.3. Limitation is based on the worst case emission rate on PTE (58 pounds per day times 365 days per year divided by 2000 pounds per ton).

Emission Limitation

0.551 pounds of particulate emissions per hour

Applicable Compliance Method:

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

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

where PE(hour) = pounds per hour of particulate emissions;

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

1.6 pounds of particulate emissions per day

Applicable Compliance Method:

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

$$\text{PE}(\text{day}) = \text{VOL} \times \text{CON}(\text{SOLID}) \times (\text{OS}) \times (1 - \text{CE})$$

PE(day) = amount of particulate emissions in pounds per day, summed over all coatings used;

VOL = amount of coating used per day in gallons as specified in C.2.b (worst case is 10 gallons);

CON(SOLID) = total solids content of coating in pounds per gallon (worst case is 3.15 pounds per gallon)

OS = overspray amount in coating operation is 50% or 0.50 as specified in permit application

CE = efficiency of control device is 90% or 0.90 as specified in permit application

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

0.29 tons particulate per year

Applicable Compliance Method:

The annual particulate rate was determined by multiplying the total daily rate (worst case of 1.6 pounds per day) by the maximum operating days (365 days per year) and then dividing by 2000 pounds per ton. Therefore the daily emission rate demonstrates compliance for the annual emission limitation.
Emission Limitation

There shall be no visible particulate emissions from the stack serving this emissions unit and no visible emissions of fugitive dust.

Applicable Compliance Method:

If required, for both the stack emissions and the fugitive dust emissions, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22 and the procedures specified in OAC rule 3745-17-03(B)(4).

2. In accordance with OAC rule 3745-21-04(B)(5), facilities located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucas, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren and Wood Counties shall use USEPA Method 24 to determine the VOC contents of the coatings. If, pursuant to section 4.3 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.

Facilities located in all other counties shall use USEPA Method 24 or formulation data to determine the VOC contents of the coatings.

F. Miscellaneous Requirements

1. None