

Facility ID: 0215090351 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: 0215090351 Emissions Unit ID: K002 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>
Paint Mixing Room and Paint Booth No. 2	OAC rule 3745-31-05(A)(3) PTI No. 02-20095	Less than 10 gallons per day of total coating usage.  3.1 pounds per day and 0.4 ton per year of VOC emissions from coating and cleanup material usage in the paint mixing room
	OAC rule 3745-21-09(U)(2)(e)(iii)	59.8 pounds per day and 7.8 tons per year of volatile organic chemical (VOC) emissions from coating and cleanup material usage in the paint booth. The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**
  - (a) The emissions unit shall be exempt from OAC rule 3745-21-09(U)(1).

**B. Operational Restrictions**

1. A dry filtration system for the paint booth shall be used while the paint booth is in operation.

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

1. The permittee shall collect and record the following information each day for the paint mixing room:
  - a. The name and identification number of each coating and cleanup material employed.
  - b. The volume, in gallons, of each coating and cleanup material employed.
  - c. The VOC content, in pounds per gallon, of each coating and cleanup material employed.
  - d. The daily VOC emissions from the paint mixing room, in pounds VOC per day, as calculated below:  
 $E = \text{Sum of } (B \times C) \text{ for each coating and cleanup material employed during the day, multiplied by } 0.05.$   
 where;  
 $E = \text{Emissions of VOC, in pounds per day}$   
 $B = \text{Volume of coating or cleanup material employed in the paint mixing room, as recorded in C.1.b above.}$   
 $C = \text{VOC content of coating (finished coating after being thinned) or cleanup material employed in the paint mixing room, as recorded in C.1.c. above.}$   
 $0.05 = \text{Permit application reports an estimation that 5% of the available VOC in the coatings and cleanup materials is released in the paint mixing room.}$
2. The permittee shall collect and record the following information each day for the paint booth:

- a. The name and identification number of each coating and cleanup material employed.
- b. The volume, in gallons, of each coating and cleanup material employed.
- c. The VOC content, in pounds per gallon, of each coating and cleanup material employed.
- d. The daily VOC emissions from the paint booth, in pounds VOC per day, as calculated below:
- $E = \text{Sum of } (B \times C) \text{ for each coating and cleanup material employed during the day, multiplied by } 0.95.$
- where;
- E = Emissions of VOC, in pounds per day
- B = Volume of coating or cleanup material employed in the paint booth, as recorded in C.2.b above.
- C = VOC content of coating (finished coating after being thinned) or cleanup material employed in the paint booth, as recorded in C.2.c above.
- 0.95 = Permit application reports an estimation that 95% of the available VOC in the coatings and cleanup materials is released in the paint booth.
- e. Whether the dry filtration system was in use while the paint booth was in operation.
3. The permittee shall record the total annual VOC emissions from the paint mixing room from all coatings and cleanup materials employed using the following equation.
- $E \text{ (tons VOC/year)} = \text{Sum of each daily VOC emissions from the paint mixing room, as calculated in C.1.d, during the calendar year, multiplied by (ton/2,000 lbs).}$
4. The permittee shall record the total annual VOC emissions from the paint booth from all coating and cleanup materials employed using the following equation.
- $E \text{ (tons VOC/year)} = \text{Sum of daily VOC emissions from the paint booth, as calculated in C.2.d, during the calendar year, multiplied by (ton/2,000 lbs).}$
5. The permit to install for this emissions unit (K002) 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutants:
- Pollutant = Ethylbenzene  
 Maximum hourly rate = 0.33 lb/hr  
 TLV = 434,192 ug/m3  
 MAGLC (TLC/42) = 10,338 ug/m3  
 Predicted 1-hr max ground level concentration at 1.0 gram/second: Paint Mix Room = 2,540 ug/m3, Paint Booth = 1,201 ug/m3  
 Pass = Predicted 1-hr max ground level concentration is less than MAGLC
- Pollutant = Methyl isobutyl ketone  
 Maximum hourly rate = 0.50 lb/hr  
 TLV = 204,826 ug/m3  
 MAGLC (TLC/42) = 4,877 ug/m3  
 Predicted 1-hr max ground level concentration at 1.0 gram/second: Paint Mix Room = 2,540 ug/m3, Paint Booth = 1,201 ug/m3  
 Pass = Predicted 1-hr max ground level concentration is less than MAGLC
- Pollutant = Isopropyl alcohol  
 Maximum hourly rate = 0.50 lb/hr  
 TLV = 983,068 ug/m3  
 MAGLC (TLC/42) = 23,406 ug/m3  
 Predicted 1-hr max ground level concentration at 1.0 gram/second: Paint Mix Room = 2,540 ug/m3, Paint Booth = 1,201 ug/m3  
 Pass = Predicted 1-hr max ground level concentration is less than MAGLC
- Pollutant = Xylene  
 Maximum hourly rate = 1.32 lbs/hr  
 TLV = 434,192 ug/m3  
 MAGLC (TLC/42) = 10,338 ug/m3  
 Predicted 1-hr max ground level concentration at 1.0 gram/second: Paint Mix Room = 2,540 ug/m3, Paint Booth = 1,201 ug/m3  
 Pass = Predicted 1-hr max ground level concentration is less than MAGLC
- Pollutant = Methyl amyl ketone  
 Maximum hourly rate = 0.38 lb/hr  
 TLV = 233,497 ug/m3  
 MAGLC (TLC/42) = 5,560 ug/m3  
 Predicted 1-hr max ground level concentration at 1.0 gram/second: Paint Mix Room = 2,540 ug/m3, Paint Booth = 1,201 ug/m3  
 Pass = Predicted 1-hr max ground level concentration is less than MAGLC
- Pollutant = Butyl Acetate  
 Maximum hourly rate = 0.25 lb/hr  
 TLV = 712,638 ug/m3  
 MAGLC (TLC/42) = 16,968 ug/m3  
 Predicted 1-hr max ground level concentration at 1.0 gram/second: Paint Mix Room = 2,540 ug/m3, Paint Booth = 1,201 ug/m3  
 Pass = Predicted 1-hr max ground level concentration is less than MAGLC

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:
    - 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.).
  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(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.
  8. 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:"  
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 its 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 submit a deviation (excursion) report to the Ohio EPA, Northeast District Office for each calendar quarter. The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30 and October 1 - December 31. These reports shall identify each day within each calendar quarter when the following events occurred:
    - a. any daily record showing that the paint mixing room and the paint booth, in combination, employed more than ten gallons of coating,
    - b. any daily record showing that the VOC emissions from the paint mixing room exceeded the allowable rate of 3.1 pounds per day and the VOC emissions from the paint booth exceeded the allowable rate of 59.8 pounds per day, and
    - c. any daily record showing that the dry filtration system for the paint booth was not in service when the paint booth was in operation.

If no deviations or excursions occurred during a calendar quarter, the permittee shall submit a quarterly report which states that no deviation and excursion occurred during that calendar quarter.

Quarterly reports shall be submitted to the Ohio EPA, Northeast District Office, by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarter.
  2. The permittee shall submit an annual report to the Ohio EPA, Northeast District Office, by January 31 of each year and shall cover the previous calendar year. This report shall include the calculated annual VOC emissions rate, in tons VOC per year, from the paint mix room and from the paint booth, as recorded in C.3 and C.4.
- E. Testing Requirements**
1. Emission Limitation:  
Less than 10 gallons per day of coating  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping requirements specified in section C.
  2. Emission Limitation:  
3.1 pounds VOC per day from coating and cleanup material usage in the paint mixing room.  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping requirements specified in section C.
  3. Emission Limitation:  
59.8 pounds VOC per day from coating and cleanup material usage in the paint booth.  
  
Applicable Compliance Method:  
Compliance shall be based upon the record keeping requirements specified in section C.
  4. Emission Limitation:  
0.4 ton VOC per year from coating and cleanup material usage in the paint mixing room.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section C.

- 5. Emission Limitation:  
7.8 ton VOC per year from coating and cleanup material usage in the paint booth.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section C.

F. **Miscellaneous Requirements**

- 1. None