

Facility ID: 0671010143 Issuance type: Final State Permit To Operate

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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: 0671010143 Emissions Unit ID: K005 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>
Coating Line No. 1 consisting of former spray booth 1 and spray booth 2 converted to drying oven.	OAC rule 3745-31-05(A)(3) (PTI 06-07366)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 24.0 lbs/hr as a daily average.</p> <p>There shall be no visible particulate emissions (PE) from the exhaust stacks.</p> <p>PE shall not exceed 2.4 tpy.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11, 3745-21-07(G)(2), 3745-21-09(U)(1)(c) and 3745-35-07(B).</p> <p>See section A.I.2.a.</p>
	OAC rule 3745-21-09(U)(1)(c)	3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating (daily volume-weighted average)
	OAC rule 3745-17-11	PE shall not exceed 0.551 lb/hr.
	OAC rule 3745-35-07(B)	VOC emissions from emissions units K005 and K006, combined, shall not exceed 99.4 tons per rolling, 12-month period.
		Total HAP emissions from emissions units K005 and K006, combined, shall not exceed 24.9 tons per rolling, 12-month period.
		Individual HAP emissions from emissions units K005 and K006, combined, shall not exceed 9.9 tons per rolling, 12-month period.
	OAC rule 3745-17-07(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(2)	See section A.I.2.b below.

**2. Additional Terms and Conditions**

- (a) The best available control technology for the control of PE from this emissions unit is to employ a dry filter media system.  
The use of photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.

**B. Operational Restrictions**

1. The maximum coating material usage for emissions units K005 and K006, combined, shall not cause the emissions to exceed 99.4 tons of VOC per rolling, 12-month period, i.e., the sum of [(Pi)x(VOCi)/2000] for all coatings employed in the 12-month period may not exceed 99.4 tons;

where:

Pi = Usage of coating materials "i" in gallons (or pounds); and

VOCi = VOC content of coating materials "i" in pounds per gallon of coating material (or percent, by weight, of solvent contained within a gallon).\*\*

\*\* this assumes that 100% of the organic solvent is emitted when using pounds per gallon (or percent, by weight) units

2. The combined maximum annual VOC, total HAPs and individual HAPs emission rates for emissions units K005 and K006, combined, shall not exceed 99.4, 24.9 and 9.9 tons per year, respectively, based upon a rolling, 12-month summation of the emission rates.

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

1. The permittee shall collect and record the following information each day for materials used in emissions units K005 and K006:
  - a. the company identification of each coating and cleanup material employed;
  - b. the total number of gallons of each coating and cleanup material employed;
  - c. the VOC content of each coating and cleanup material, in pounds per gallon, excluding water and exempt solvents;
  - d. the total VOC emission rate, in pounds (the sum of (b) times (c) for all coatings employed);
  - e. the total number of hours the emissions unit was in operation;
  - f. the calculated average hourly VOC emission rate in pounds per hour, based upon the total daily coatings and cleanup materials employed, and the actual hours of operation of the emission unit, i.e., (d)/(e); and
  - g. documentation for each coating and cleanup material as to whether it is or is not a photochemically reactive material as defined by OAC rule 3745-21-01(C)(5).

Note: The cleanup materials employed by this emissions unit are captured and shipped off-site for reclamation. Therefore, for the purpose of tracking emissions, the number of gallons of cleanup material employed is the difference between the gallons of cleanup material received and the gallons of cleanup material shipped off-site.

2. The permittee shall collect and record the following information each month for emissions units K005 and K006:
  - a. the name and identification number of each coating, and cleanup material employed;
  - b. the VOC content of each coating (excluding water and exempt solvents), and cleanup material, in pounds per gallon;
  - c. the total HAP content of each coating, and cleanup material, in pounds per gallon;
  - d. the individual HAP content of each coating, and cleanup material, in pounds per gallon;
  - e. the number of gallons of each coating, and cleanup material employed;
  - f. the total VOC emissions (VOC applied) from all coatings, and cleanup materials employed [the sum of (2.b. times 2.e. divided by 2000 lb/ton) for all coatings and cleanup materials], in tons;
  - g. the total HAP emissions (HAP applied) from all coatings and cleanup materials employed, in tons;
  - h. the individual HAP emissions (HAP applied) from all coatings, and cleanup materials employed, in tons;
  - i. the rolling, 12-month summation of the VOC emissions, in tons;
  - j. the rolling, 12-month summation of the total HAP emissions, in tons;
  - k. the rolling, 12-month summation of the individual HAP emissions, in tons; and
  - l. the rolling, 12-month summation of the gallons of each coating and clean-up material employed.

Note: The cleanup materials employed by this emissions unit are captured and shipped off-site for reclamation. Therefore, for the purpose of tracking emissions, the number of gallons of cleanup material employed is the difference between the gallons of cleanup material received and the gallons of cleanup material shipped off-site.

3. 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, and coating was being applied.
4. The permit to install for this emissions unit (K005) 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" pollutant(s):

Pollutant: Xylene

TLV (mg/m3): 651.3

Maximum Hourly Emission Rate (lbs/hr): 1.17

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 134

MAGLC (ug/m3): 10330

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 still 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.).

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.

5. 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 notify the Ohio EPA Southeast District Office in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Ohio EPA Southeast District Office within 30 days following the end of the calendar month.
2. The permittee shall notify the Ohio EPA Southeast District Office in writing of any daily 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 Ohio EPA Southeast District Office within 30 days after the event occurs.
3. The permittee shall submit deviation (excursion) reports that identify each month during which the VOC emissions from emissions units K005 and K006, combined, exceeded 99.4 tons per rolling, 12-month period as specified in sections A.1 and B.2 of this permit.
4. The permittee shall submit deviation (excursion) reports that identify each month during which the total HAP emissions from emissions units K005 and K006, combined, exceeded 24.9 tons per rolling, 12-month period as specified in sections A.1 and B.2 of this permit.
5. The permittee shall submit deviation (excursion) reports that identify each month during which the individual HAP emissions from emissions units K005 and K006, combined, exceeded 9.9 tons per rolling, 12-month period as specified in sections A.1 and B.2 of this permit.
6. The deviation (excursion) reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.3.

**E. Testing Requirements**

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

VOC emissions shall not exceed 24.0 lbs/hr as a daily average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section C.1. Formulation data or USEPA Method 24 shall be used to determine the VOC content of the coatings and cleanup materials.

Emission Limitation:

There shall be no visible PE from the exhaust stacks.

Applicable Compliance Method:

Compliance with the visible PE limitation shall be determined through visible emission observations performed

in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emissions testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

Emission Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating (daily volume-weighted average)

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section C.1. Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the coatings.

Emission Limitation:

VOC emissions from emissions units K005 and K006, combined, shall not exceed 99.4 tons per rolling, 12-month period.

Applicable Compliance Method:

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

Emission Limitation:

Total HAP emissions from emissions units K005 and K006, combined, shall not exceed 24.9 tons per rolling, 12-month period.

Applicable Compliance Method:

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

Emission Limitation:

Individual HAP emissions from emissions units K005 and K006, combined, shall not exceed 9.9 tons per rolling, 12-month period.

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 lb/hr.

Applicable Compliance Method:

To determine the actual worst case particulate emission rate, the following equation may be used:

$$PE = (M) * (1-TE) * (1-CE)$$

where:

PE = particulate matter emission rate (lb/hr);

M = maximum coating solids usage rate (5.4 lbs/hr);

TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.65 for HVLP spray guns); and

CE = control efficiency of the control equipment (90% for panel filters).

If more than one piece of control equipment is used in series, the equation should be multiplied by additional (1-CE) terms for each additional piece of equipment.

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

Emission Limitation:

PE shall not exceed 2.41 tpy.

Applicable Compliance Method:

The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.551 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

**F. Miscellaneous Requirements**

1. None