

Additional Terms and Conditions

A. Operational Restrictions

1. The permittee shall ensure that all exhaust filters are in place and operating correctly at all times that emission units K002 and K003 are in use.
2. All coating operations causing air emissions, including operations outside of the spray booth, shall occur only when the exhaust fans of the spray booth are operating.

B. Record keeping Requirements for Emission Units K002 and K003.

1. The permittee shall collect and record the following information each day for K002 and K003:
 - a. The name and identification number of each coating employed.
 - b. The volume, in gallons, of each coating employed.
 - c. The total volume, in gallons, of all of the coatings employed.
2. The permittee shall collect and record the following information for the purpose of determining annual VOC emissions from K002 and K003:
 - a. The name and identification of each cleanup material employed.
 - b. The number of gallons of each cleanup material employed.
 - c. The VOC content of each cleanup material, in pounds per gallon.
 - d. The VOC content of each coating, as applied, in pounds per gallon.
 - e. The total VOC emissions from all coatings employed, in pounds or tons.
3. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five (5) years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

C. Reporting Requirements for Emission Units K002 and K003.

1. The permittee shall notify the Ohio EPA Central District Office in writing of any daily record showing that K002 and K003 employed more than the applicable maximum daily coating usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA Central District Office within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports which specify the total VOC emissions from K002 and K003 for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall submit required reports in the following manner:
 - a. Reports of any required monitoring and/or record keeping information shall be submitted to the Ohio EPA Central District Office.
 - b. Quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA Central District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

D. Compliance Determination for Emission Units K002 and K003.

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation:

4.2 lbs VOC/hr

Applicable Compliance Method:

Hourly VOC emissions from coating usage shall be determined by multiplying the maximum amount of coating used in an hour (0.625 gal/hr) with the maximum VOC content of the coating (5.1 lbs/gal) to obtain VOC emissions in pounds per hour.

Hourly VOC emissions from clean up solvent usage shall be determined by multiplying the maximum amount of clean up solvent used in an hour (gal/hr) with the maximum VOC content of the clean up solvent (lbs/gal) to obtain VOC emissions in pounds per hour.

Compliance with the above limit shall be determined by adding the hourly VOC emissions from coating and clean up solvent usage.

- b. Emission Limitation:
4.6 tons VOC per year from coating usage

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum amount of coating used in a year (1,800 gal/yr) with the maximum VOC content of the coating (5.1 lbs/gal) and divide by 2,000 lbs per ton to get the VOC emissions in tons per year.

- c. Emission Limitation:
1.44 tons VOC per year from clean up solvent usage

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum amount of clean up solvent used in a year (gal/yr) with the maximum VOC content of the coating (lbs/gal) and divide by 2,000 lbs per ton to get the VOC emissions in tons per year.

- d. Emission Limitation:
5.1 lbs VOC/gallon excluding water and exempt solvents for coating material and 8.76 lbs VOC/gallon for clean-up material.

Applicable Compliance Method:

OAC rule 3745-21-10(B). USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or

operator determines that Method 24 or 24A cannot be used for a particular coating or ink, 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. Emission Limitation:
0.008 lb particulate emissions/hour

Applicable Compliance Method:

Use of filters during all periods of spray booth operation. To determine the actual worst case emissions rate for particulate matter from emission sources K002 and K003 the following equation shall be used:

$$E = \text{maximum coating solids usage rate (pounds/hr)} * (1 - TE) * (1 - CE)$$

Where:

E = particulate matter emissions rate (lbs/hr)

TE = transfer efficiency of painting equipment in decimal form (use 0.65), transfer efficiency is the ratio of the amount of coating solid deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment in decimal form (Use 99% for filters)

E. Air Toxics

1. This PTI allows the use of the coatings and cleanup materials specified by the permittee in the application for this PTI. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the VOC emission limitations specified in this permit were established in accordance with the Ohio EPA's "Air Toxics Policy" and are based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the TSCREEN model and a comparison of the predicted 1 hour maximum ground-level concentration to the MAGLC. The following summarizes the results of the modeling for each pollutant:

Pollutant: Xylene
TLV (ug/m3):434

Maximum Hourly Emission Rate (lbs/hr):4.2
Predicted 1 Hour Maximum Ground-Level Concentration at the Fence line
(ug/m3):4151.3
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3):
10333.33

Pollutant: Ethyl benzene
TLV (ug/m3):434
Maximum Hourly Emission Rate (lbs/hr):4.2
Predicted 1 Hour Maximum Ground-Level Concentration at the Fence line
(ug/m3):4151.3
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3):
10333.33

Pollutant: Butyl acetate
TLV (ug/m3):713
Maximum Hourly Emission Rate (lbs/hr):4.2
Predicted 1 Hour Maximum Ground-Level Concentration at the Fence line
(ug/m3):4151.3
Maximum Acceptable Ground-Level Concentration (MAGLC)
(ug/m3):10333.33

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to this PTI and the operating permit:

- a. Any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup 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 specified in the above table.
- b. Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table.
- c. Any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this

permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.

- d. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)].
- e. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" (HAPS) as defined in OAC rule 3745-77-01(V).