

Facility ID: 1409000859 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: 1409000859 Emissions Unit ID: K004 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>
Flexographic printing press	OAC rule 3745-31-05 (PTI 14-4199) 40 CFR, Part 63, Subpart KK	See A.2.  The emissions limits established by this rule are less stringent than those established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-21-09(Y)(1)(a)	The volatile organic compound (VOC) emission limitations based on this rule are the same as those established pursuant to OAC rule 3745-31-05.

**2. Additional Terms and Conditions**

- (a) The VOC content of each coating and ink employed in this emissions unit shall not exceed 0.44 lb/gallon.  
The VOC content of each coating and ink employed in this emissions unit shall not exceed forty percent VOC by volume of the coating or ink (excluding water and exempt solvents), as applied, or twenty-five percent VOC by volume of the volatile matter in the coating or ink.  
The VOC content of each cleanup material employed in this emissions unit shall not exceed 3.5 lbs/gallon of cleanup material.  
The actual emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall be less than 10 TPY for any single HAP and 25 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.  
The VOC emissions from this emissions unit shall not exceed 1.67 lbs/hr and 5.58 TPY (including cleanup).  
  
The hourly VOC emissions limit is based on the emissions unit's potential to emit. Therefore, no hourly record keeping, reporting or testing is required to demonstrate compliance with this limit.  
The NH3 emissions from this emissions unit shall not exceed 0.2 lb/hr and 0.63 TPY.  
  
The hourly NH3 emissions limit is based on the emissions unit's potential to emit. Therefore, no hourly record keeping, reporting or testing is required to demonstrate compliance with this limit.

**B. Operational Restrictions**

1. The total amount of coatings and inks employed in this emissions unit shall not exceed 20,590 gallons per year (including water).
2. The amount of organic cleanup materials employed in this emissions unit shall not exceed 600 gallons per year.

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

1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The name and identification number of each coating, ink and cleanup material employed.
  - b. The VOC content of each coating and ink in percent by volume (excluding water and exempt solvents) of the coating or ink, as applied, and in percent by volume of the volatile matter in the coating or ink.
  - c. The VOC content of each coating and ink (including water and exempt solvents), as applied, in lbs of VOC/gallon.

- d. The gallons, as applied, of each coating and ink employed.
  - e. The gallons of each cleanup material employed.
  - f. The VOC content of each cleanup material employed, in lbs of VOC/gallon.
  - g. The total gallons, as applied, of all coatings and inks employed.
  - h. The total gallons of all cleanup materials employed.
  - i. The total VOC emissions, i.e., the sum of (c) times (d) plus (e) times (f) for each coating, ink and cleanup material employed divided by 2000, in tons.
2. The permittee shall collect and record the following information each month for the entire facility:
- a. The name and identification number of each coating and ink employed.
  - b. The individual HAP content for each HAP of each coating and ink, in pounds of individual HAP per gallon of coating and ink, as applied.
  - c. The total combined HAPs content of each coating and ink, in pounds of combined HAPs per gallon of coating and ink, as applied (sum all the individual HAP contents from (b)).
  - d. The number of gallons of each coating and ink employed.
  - e. The name and identification of each cleanup material employed.
  - f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied.
  - g. The total combined HAPs content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from (f)).
  - h. The number of gallons of each cleanup material employed.
  - i. The total individual HAP usage (emissions) for each HAP from all coatings, inks and cleanup materials employed, in tons per month (for each HAP the sum of (b) times (d) for each coating and ink plus the sum of (f) times (h) for each cleanup material, divided by 2000 lbs/ton).
  - j. The total combined HAPs usage (emissions) from all coatings, inks and cleanup materials employed, in tons per month (the sum of (c) times (d) for each coating and ink plus the sum of (g) times (h) for each cleanup material, divided by 2000 lbs/ton).
  - k. The updated rolling, 12-month summation of usage for each individual HAP emissions\*\*, in tons. This shall include the information for the current month and the preceding eleven calendar months.
  - l. The updated rolling, 12-month summation of usage for total combined HAPs emissions\*\*, in tons. This shall include the information for the current month and the preceding eleven calendar months.
- \* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a line-by-line basis.
- \*\* This assumes the HAP(s) emitted are the same as the amounts of HAP(s) used since all HAP(s) used evaporated.
3. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxics Policy:
- a. Background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.).
  - b. A copy of the resulting computer model runs that show the results of the application of the Air Toxics Policy for the change.
- D. Reporting Requirements**
- 1. The permittee shall notify the Hamilton County Department of Environmental Services of any monthly record which shows the use of noncomplying coatings, inks or cleanup materials (i.e., coatings, inks or cleanup materials exceeding the allowable VOC content limits). A copy of such record shall be sent to the Hamilton County Department of Environmental Services within thirty days following the end of the calendar month.
  - 2. The permittee shall also submit annual reports which specify the following for for the previous calendar year:
    - a. The total VOC emissions from this emissions unit.
    - b. The total coating and ink usage for this emissions unit.
    - c. The total cleanup material usage for this emissions unit.

These reports shall be submitted by January 31 of each year.
  - 3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the HAP emission limitations set forth in this Permit to Operate. The reports shall be submitted in accordance with section 3 of the General Terms and Conditions.
  - 4. The permittee shall also submit annual reports that summarize the actual annual individual HAP and combined HAPs emissions for this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

1. Compliance with the emission limitations in Sections A.1 and A.2, and with the material usage and content restrictions in Sections A.2 and B of these terms and conditions, shall be determined in accordance with the following methods:
  - a. Emission Limitations:  
1.67 lbs/hr and 5.58 TPY of VOC from K004 (including cleanup)
  - Applicable Compliance Method:  
Compliance with the hourly limit shall be determined by multiplying the maximum VOC content, in lbs/gal, by the maximum hourly coating usage, in gallons/hour. Compliance with the annual VOC emission limitation shall be determined by the sum of the monthly VOC emission records required pursuant to Section C.1.
  - b. Emission Limitations:  
Less than 10 TPY for any single HAP and less than 25 TPY for any combination of HAPs
  - Applicable Compliance Method:  
Compliance with the HAP emission limitations shall be based upon the record keeping performed in accordance with Section C.2 of these terms and conditions.
  - c. Emission Limitations:  
0.2 lb/hr and 0.63 TPY of NH3 from emissions unit K004
  - Applicable Compliance Method:  
Compliance with the NH3 emission limitations shall be based upon the following formulas:  
  
Hourly NH3 emission = the maximum NH3 content in lbs/gal x the maximum hourly coating usage in gallons.  
  
Annual NH3 emission = the sum of the NH3 content in lbs/gal x the annual usage in gallons for each coating and cleanup material, and dividing by 2000 lbs/ton.
  - d. Materials Content and Usage Restrictions:  
Materials Content:  
Coatings: 0.44 lb/gal of VOC (each coating and ink) in emissions unit K004 (including water) and less than 40 percent VOC by volume (excluding water), or twenty-five percent VOC by volume of the volatile matter in the coating or ink.  
Cleanup: 3.5 lbs/gal of VOC (each cleanup) in emissions unit K004
  - Materials Usage Restrictions:  
Coatings and inks: 20,590 gal/yr from emissions unit K004  
Cleanup: 600 gal/yr
  - Applicable Compliance Method:  
Compliance with the VOC content limitations and annual usage restrictions shall be based upon the record keeping performed pursuant to Section C.1 of these terms and conditions.
2. USEPA Method 24 shall be used to determine the VOC content for each coating and ink employed. 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 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.  
  
Formulation data or USEPA Method 24 shall be used to determine the VOC content of each cleanup material employed.  
  
Formulation data shall be used to determine the NH3 content of each coating and cleanup material employed.

**F. Miscellaneous Requirements**

1. This permit allows the use of materials (typically coatings, inks and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of OAC rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitations specified in this permit were established using the Ohio EPA's "Air Toxics Policy" and are based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxics Policy" was applied for each pollutant using the SCREEN 3.0 model and then the predicted 1-hour maximum ground-level concentration was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:
 

Pollutant: NH3  
TLV (ug/m3): 17,000  
Maximum Hourly Emission Rate (lbs/hr): 2.45  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 215  
MAGLC (ug/m3): 405

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

  - a. Changes in the composition of the materials used (typically for coatings, inks, 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 specified in the above table.
  - b. Changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height).

c. Changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted.

d. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. The change is not otherwise considered a "modification" under OAC Chapter 3745-31.

b. The permittee can continue to comply with the allowable emission limitations specified in its permit to install.

c. Prior to the change, the applicant conducts an evaluation pursuant to the Air Toxics Policy, determines that the changed emissions unit still satisfies the Air Toxics Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxics Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitations established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.