

Facility ID: 1413020453 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: 1413020453 Emissions Unit ID: K003 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>
K003 - Flexographic Printing Press with Glue Station (Langston Flexographic)	OAC rule 3745-31-05(A)(3) (PTI 14-04806)	Volatile Organic Emissions (VOCs) from inks, adhesives and cleanup materials shall not exceed 8.13 pounds per hour.  Ammonia emissions shall not exceed 0.74 pounds per hour and 1.08 tons per year.  See Sections A.2.a, A.2.c, A.2.d and A.2.e.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) and OAC rule 3745-21-09(Y)(1)(a).
	OAC rule 3745-31-05(C)	Volatile Organic Emissions (VOCs) from inks, adhesives and cleanup materials shall not exceed 13.01 tons per year, based on a rolling, 12-month summation.
	OAC rule 3745-21-09(Y)(1)(a)	See Section A.2.b.

**2. Additional Terms and Conditions**

- (a) The hourly VOC and ammonia emission limitations specified above are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these emission limitations.  
 The VOC content, as applied, of each ink and adhesive employed in this emissions unit shall not exceed the following limitation:
  - i. Forty percent (40%) VOC by volume of each ink and adhesive, excluding water and exempt solvents; or
  - ii. Twenty-five percent (25%) VOC by volume of the volatile matter in each ink and adhesive.  
 The VOC content of each ink employed in this emissions unit shall not exceed 8.3% VOC, by weight, as applied.  
 The VOC content of each adhesive employed in this emissions unit shall not exceed 3.6% VOC, by weight, as applied.  
 The VOC content of each cleanup material employed in this emissions unit shall not exceed 30% VOC, by weight.

**B. Operational Restrictions**

1. The maximum annual ink usage rate shall not exceed 259,200 pounds per year, based upon a rolling, 12-month summation.
2. The maximum annual adhesive usage rate shall not exceed 100,000 pounds per year, based upon a rolling, 12-month summation.
3. The maximum annual cleanup material usage rate shall not exceed 3,000 pounds per year, based upon a rolling, 12-month summation.

**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 company identification of each ink, adhesive and cleanup material employed;
  - b. the amount, in pounds, of each ink, as applied;
  - c. the amount, in pounds, of each adhesive, as applied;
  - d. the amount, in pounds, of each cleanup material employed;
  - e. the percent VOC, by volume, of each ink and adhesive, excluding water and exempt solvents, as applied, or the percent VOC, by volume, of the volatile matter in each ink and adhesive [calculated in accordance with the equation(s) specified in paragraph (B)(8) of OAC rule 3745-21-10 using equation CVOC,5 (for adhesive and ink) or equation CVOC,6 (for volatile matter)];
  - f. the VOC content of each ink, as applied, in percent by weight;
  - g. the VOC content of each adhesive, as applied, in percent by weight;
  - h. the VOC content of each cleanup material employed, in percent by weight;
  - i. the ammonia content, in percent by weight, of each ink, adhesive and cleanup material employed;
  - j. the total VOC emissions from all inks, adhesives and cleanup materials employed, in pounds [summation of (b x f/100%) for all coatings, plus the summation of c x g/100% for all adhesives, plus the summation of (d x h/100%) for all cleanup materials employed];
  - k. the total ammonia emissions, in pounds [summation of (b x i/100%) for all inks, plus the summation of c x j/100% for all adhesive materials, plus the summation of (d x k/100%) for all cleanup materials];
  - l. the updated rolling, 12-month summation of usage rates for all inks, adhesives, and cleanup materials employed, in pounds;
  - m. the updated rolling, 12-month summation of the total VOC emissions for all inks, adhesives, and cleanup materials employed, in tons.
  - n. the total VOC emissions, in tons, from all inks, adhesives and cleanup materials employed in this emissions unit for the calendar year (summation for C.1.j for each month of the calendar year and divided by 2000 pounds per ton); and
  - o. the total ammonia emissions, in tons (summation of C.1.k for each month of the calendar year and divided by 2000 pounds per ton).

2. The permit to install for this emissions unit (K003) 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 SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the 'worst case' pollutant and for the total allowable emission rate of that pollutant from emissions units K001 through K005:

Pollutant: Ammonia  
 TLV (ug/m3): 17,410  
 Maximum Hourly Emission Rate (pounds per hour): 2.77  
 (Facility-wide ammonia emissions rate of 2.77 pounds per hour considered)  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 215.1  
 MAGLC (ug/m3): 415

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 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");
- 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.)

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover that previous calendar year.

#### D. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the VOC content (in percent by weight and/or volume) exceeds the applicable limitations for inks, adhesives or cleanup materials as specified in Section A.2 of this permit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
2. The permittee shall submit quarterly deviation (excursion) reports that identify:

- a. any exceedance of the limitation on the rolling, 12-month summation of VOC emissions; and
  - b. any exceedance of the limitation on the rolling, 12-month summation usages of the inks, adhesives and cleanup materials employed in this emissions unit.
3. The deviation reports shall be submitted in accordance with the reporting requirement of the General Terms and Conditions of this permit.
  4. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services that specify the total VOC and ammonia emissions, in tons, for the calendar year. The reports shall be submitted by January 31 of each year and cover the previous calendar year.

**E. Testing Requirements**

1. Compliance with the VOC emission limitations, ammonia emission limitations, VOC content limitations and the material usage restrictions specified in Sections A and B shall be determined by the following methods:  
Emissions Limitations:  
Volatile Organic Emissions (VOCs) from inks, adhesives and cleanup materials shall not exceed 13.01 tons per year, based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the annual VOC emission limitation shall be determined by the record keeping requirements specified in Section C.1.

Emission Limitation:

Emissions of ammonia shall not exceed 1.08 tons per year.

Applicable Compliance Method:

Compliance with the annual ammonia emission limitation shall be determined by the record keeping requirements specified in Section C.1.

Emission Limitation:

The volatile organic compound (VOC) content for each ink and adhesive employed in this emissions unit shall not exceed forty percent (40%) VOC by volume of each ink and adhesive, excluding water and exempt solvents; or twenty-five percent (25%) VOC by volume of the volatile matter in each ink and adhesive.

Applicable Compliance Method:

Compliance with the VOC content limitation shall be determined by the record keeping requirements specified in Section C.1.

If required, 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 Method 24 as outlined in 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.

Emission Limitation:

The volatile organic compounds (VOC) content for each ink, adhesive and cleanup material employed in this emissions unit shall not exceed 8.3% VOC, by weight, for each ink employed; 3.6% VOC, by weight, for each adhesive employed; 30% VOC, by weight, for each cleanup material employed.

Applicable Compliance Method:

Compliance with the VOC content limitations shall be determined by the record keeping requirements specified in Section C.1.

If required, 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 Method 24 as outlined in 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.

Material Usage Restriction:

The material usage in this emissions unit shall not exceed 259,000 pounds of ink per year, 100,000 pounds of adhesives per year, and 3,000 pounds of cleanup materials per year, based upon a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the material usage restrictions shall be determined by the record keeping requirements specified in Section C.1.

**F. Miscellaneous Requirements**

1. None