

Facility ID: 1413070417 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: 1413070417 Emissions Unit ID: K001 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>
K001-Rotogravure Printing Press	OAC rule 3745-31-05 (PTI 14-4636)	Volatile Organic Compound (VOC) emissions shall not exceed 443 pounds per day and 23.4 tons per year. See term A.2.a and B.1. The requirements of this rule also include compliance with the requirements of 40 CFR Part 63, Subpart KK and OAC rule 3745-31-05(C).
	40 CFR 63 Subpart KK OAC rule 3745-21-09(Y)	See terms A.2.c and A.2.d. Exempt.
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Title V.	See terms B.1.a, B.1.b, and B.2. See term A.2.c.

2. Additional Terms and Conditions

- (a) The VOC content as applied of all coatings shall not exceed the following:
 - Coatings VOC Content
(Percent by weight)
 - Solvent Based Inks 100 percent
 - Water Based Inks 58.9 percent
 - The permittee shall not employ cleanup materials with a VOC content greater than 7.4 pounds VOC/gallon, as applied.
 - The actual emissions [as defined by OAC 3745-77-01(BB)] of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act emission unit K001 including any de minimus air contaminant sources as defined in OAC rule 3745-15-05, and any permanent exemption air contaminant sources installed subsequent to the issuance of this permit shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a 12-month rolling summation.
 - The permittee commits to and meets the criteria to be considered an area source for Hazardous Air Pollutants, and is subject only to the record keeping and reporting provisions in 40 CFR 63.829(d) and 40 CFR 63.830(b)(1).

B. Operational Restrictions

1. The permittee shall not employ coatings in excess of the following:
 - a. For solvent based inks, 253.2 pounds per day and 10,323 pounds per year; and
 - b. For water based inks, 297 pounds per day and 60,000 pounds per year.
2. The use of cleanup materials shall not exceed 2 gallon/day and 150 gallon/yr.*

* Note Terms B.1.a and B.1.b are to restrict VOC emissions to qualify for exemption pursuant to OAC rule 3745-21-09(Y)(2).

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for each emission unit described in term A.2.c:
 - a. the name and identification number of each ink and coating, employed;
 - b. the individual Hazardous Air Pollutant (HAP) content for each HAP of each ink and coating in pounds of individual HAP per gallon of coating, as applied;
 - c. the total combined HAP content of each coating in pounds of combined HAPs per gallon of ink and coating, as applied (sum all the individual HAP contents from (b));
 - d. the number of gallons of each ink and coating 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 HAP 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 for each HAP from all ink, coatings and cleanup materials employed, in pounds or tons per month [for each HAP) the sum of (b) times (d) for each ink and coating and the sum of (f) times (h) for each cleanup material];
 - j. the total combined HAP usage from all inks, coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material]; and
 - k. the updated rolling, 12-month summation of usage for each individual HAP emissions**, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months; and
 - l. the updated rolling, 12-month summation of usage for total combined HAP emissions**, in pounds or 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 individual emissions unit basis.

** This assumes the HAP(s) emitted are the same as the amounts of HAP(s) used since all HAP(s) used evaporated.

2. The permittee shall collect and record the following information each day :
 - a. The name and identification number of each coating and cleanup material, as applied;
 - b. The VOC content of each coating in percent by weight, as applied;
 - c. The VOC content of each cleanup material in pounds per gallon, as applied; and,
 - d. The amount of each coating and cleanup material employed, in pounds, as applied.
3. The permittee shall maintain monthly records of the total VOC emissions.
4. The permit to install for emissions unit K001 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 Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Toluene
 TLV (ug/m3): 188,000
 Maximum Hourly Emission Rate (lbs/hr): 71.4
 Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 3046
 Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 4476

Pollutant: Ammonia
 TLV (ug/m3): 17,000
 Maximum Hourly Emission Rate (lbs/hr): 1.46
 Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 64.5
 Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 405

Pollutant: Ethanolamine
 TLV (ug/m3): 7500
 Maximum Hourly Emission Rate (lbs/hr): 0.12
 Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 50.8
 Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 179

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics 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 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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. when the 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 Hamilton County Department of Environmental Services in writing of any daily record showing any exceedance of the daily coating usage or VOC content limitations or any exceedance of the annual coating or cleanup material usage limitations.
2. The permittee shall also submit annual reports which specify the total VOC emissions from this emissions unit and the individual and combined rolling, 12-month total HAP emissions from the facility for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for individual HAPs and total HAPs and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels.

E. Testing Requirements

1. Emission Limitations:

Volatile Organic Compound (VOC) emissions shall not exceed 443 pounds per day and 23.4 TPY.

Applicable Compliance Method:

The daily emission limitation was established with the following calculations:

$$(253.2 \text{ lbs of solvent based ink/day} \times 1 \text{ lb of VOC/lb of solvent based ink}) + (297 \text{ lbs of water based ink/day} \times 0.589 \text{ lb of VOC/lb of water based ink}) + (2 \text{ gal of cleanup material/day} \times 7.4 \text{ lbs of VOC/gal cleanup material}) = 443 \text{ lbs/day of VOC.}$$

The annual emission limitation was established with the following calculations:

$$[(10,323 \text{ lbs of solvent based ink/year} \times 1 \text{ lb of VOC/lb of solvent based ink}) + (60,000 \text{ lbs of water based ink/year} \times 0.589 \text{ lb of VOC/lb of water based ink}) + (150 \text{ gal of cleanup material/year} \times 7.4 \text{ lbs of VOC/gal of cleanup material})] \times \text{ton}/2000 \text{ lbs} = 23.4 \text{ TPY of VOC.}$$
2. Emission Limitation:

The total allowable usage of Hazardous Air Pollutants (HAPs) from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs.

Applicable Compliance Method:

Compliance with the HAPs usage limitations above shall be based on the record keeping requirements established in term C.1.
3. Compliance with the operational restrictions shall be demonstrated by the recordkeeping requirements in Section C.2 and D.2.
4. USEPA Methods 24 and 24A shall be used to determine the VOC contents for the coatings and cleanup materials employed in this emissions unit. If, pursuant to 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.

F. Miscellaneous Requirements

1. None