

Facility ID: 1409000859 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: 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>
K004- Flexographic Printing Press	OAC rule 3745-31-05(A)(3) (PTI 14-4199)	The Volatile Organic Compound (VOC) emissions shall not exceed 1.67 lbs of VOC/hour and 5.58 TPY of VOC. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(Y)(1)(a), 3745-31-05(C) and 40 CFR Part 63, Subpart KK. See terms A.2.b, A.2.c and A.2.d. See sections B.1 and B.2.
	OAC rule 3745-21-09(Y)(1)(a) 40 CFR Part 63, Subpart KK OAC rule 3745-31-05(C)	See term and condition A.2.c. See terms A.2.e and A.2.f. See term and condition A.2.e.

2. Additional Terms and Conditions

- (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the emission limitations, VOC content limitations and material usage limitations. The VOC content of the coatings and inks employed in this emissions unit shall not exceed the following:
 - i. forty percent VOC by volume of the coatings and inks, excluding water, and exempt solvents; or
 - ii. twenty-five percent VOC by volume of the volatile matter in the coatings and inks. The VOC content of the coatings and inks employed in this emissions unit shall not exceed 0.44 pound of VOC per gallon, as applied, including water. The VOC content of the cleaning materials employed in this emissions unit shall not exceed 3.5 pounds of VOC per gallon. The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units K001 (paper web rod coater), K002 (continuous paper web rod coater), K003 (continuous paper web coater), K004 (flexographic printing press) and all de minimus emissions units (as defined in OAC rule 3745-15-05), all emissions units exempt from the requirement to obtain a permit to install pursuant to OAC rule 3745-31-03 currently, and future to-be-installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAP emissions. Compliance with the above limitations shall be based on a rolling, 12-month summation.

The permittee has existing records to demonstrate compliance with the existing installed air contaminant sources upon issuance of this permit modification.

* This assumes the HAP's emitted are the same as the amount of HAP's used, since all HAP's used evaporate. 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). The hourly emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.

B. Operational Restrictions

1. The maximum annual coating and ink usage from this emissions unit shall not exceed 20,590 gallons, including water.
2. The maximum annual organic cleanup material usage from this emissions unit shall not exceed 600, including water.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for the emissions units identified in term and condition A.2.e:
 - 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 coatings and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (b) times (d) for each coating plus the sum of (f) times (h) for each cleanup material];
 - j. the total combined HAP usage from all 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];
 - 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 line-by-line basis.

2. The permittee shall maintain monthly records which list the following information for each ink, coating and cleanup material employed in emissions unit K004:
 - a. the company identification of each ink, coating, and cleanup material employed;
 - b. the percent VOC by volume of each ink and coating employed, excluding water and exempt solvents or the percent VOC by volume of the volatile matter in each coating and ink employed;
 - c. the VOC content of each ink, coating, and cleanup material employed, in pounds per gallon as applied, including water;
 - d. the total gallons of each ink, coating, and cleanup material employed as applied, including water;
 - e. the total VOC emissions, in pounds or tons [(c x d) for all coating, ink and cleanup materials], and
 - f. the total annual VOC emissions [the summation of monthly VOC emissions for the calendar year].
3. The permit to install for this emissions unit K004 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 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of 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(s):

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

Pollutant: ammonia

TLV (ug/m3): 17,000

Total Maximum Hourly Emission Rate (lbs/hr): 2.45

Predicted 1 Hour Maximum Ground-Level Concentration at the Fence line (ug/m3): 215

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 405

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 the previous calendar year.

D. Reporting Requirements

1. The permittee shall submit deviation reports which identify any exceedance of the HAP emission limitations set forth in term and condition A.2.e. If no exceedances occurred, the permittee shall state so in the report.
2. The permittee shall submit annual reports which specify the total volatile organic compound emissions and the coating, ink and cleanup material usage from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of noncomplying coatings and/or inks. The notification shall include a copy of such records and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurs.
4. Unless otherwise noted in the above terms, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 1.67 pounds of VOC per hour.

Applicable Compliance Method:

The hourly VOC emission rate is based on the emissions unit's potential to emit. The potential to emit was calculated by multiplying the maximum VOC content per gallon of 0.44 pound of VOC per gallon by the maximum usage rate of 3.8 gallons of inks and coatings per hour.

Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 5.58 tons per year from inks and coatings.

Applicable Compliance Method:

The emission limitation was calculated using the following equation:

$$(20590 \text{ gallons of inks and coatings per year} \times 0.44 \text{ pound of VOC per gallon of inks and coatings}) + (600 \text{ gallons of organic cleanup material per year} \times 3.5 \text{ pounds of VOC per gallon of organic cleanup material}) \times \text{ton}/2000 \text{ pounds} = 5.58 \text{ TPY VOC.}$$

Compliance shall be demonstrated by the recordkeeping required in term and condition C.2.

2. Compliance with the HAPs emissions limitations shall be based on the record keeping requirements established in section C.1.
3. Compliance with the VOC content limitations in terms and conditions A.2.b, A.2.c and A.2.d shall be based on the record keeping requirements established in section C.2.
4. Compliance with the material usage limitation in sections B.1 and B.2 shall be determined by the record keeping required in section C.2.
5. 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