

Facility ID: 1677150028 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.

new final permit to install prior to the change(s).

The total allowable emissions of Hazardous Air Pollutants (HAP), as identified in Section 112(b) of Title III of the Clean Air Act, from the nine sources in this permit (K001 through K003, K006, K007, K009 through K011, & P001) shall not exceed 9.0 tons/year for any single HAP and 22.2 tons/year for any combination of HAPs. VOC emissions for the nine emissions units in this permit are restricted to 52.0 tons/year. Compliance with the above limitations shall be based upon a rolling, 12-month summation.

B. Operational Restrictions

1. The maximum annual VOC material usage* (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 52.0 tons, based upon a rolling, 12-month summation of the VOC material usage figures.

*Annual VOC material usage rate (input) is equivalent to an annual VOC emissions rate and is based upon the solvent in the materials employed or applied being emitted.
2. The maximum annual individual HAP material usage** (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 9.0 tons, based upon a rolling, 12-month summation of the individual HAP material usage figures.

**Annual individual HAP material usage rate (input) is equivalent to an annual individual HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.
3. The maximum annual combined HAP material usage rate*** (from inks, coatings, and adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 22.2 tons, based upon a rolling, 12-month summation of the combined HAP material usage figures.

***Annual combined HAP material usage rate (input) is equivalent to an annual combined HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for K001:
 - a. the name and company identification of each ink and coating employed; and
 - b. the VOC content in percentage VOC by volume of each coating and ink, excluding water and exempt solvents, or the VOC content in percentage VOC by volume of the volatile matter in each coating and ink.

USEPA Methods 24 and 24A, as applicable, shall be used to determine the VOC content for coatings, flexographic and rotogravure printing inks, and related coatings. If, pursuant to Methods 24 and 24A, 40 CFR Part 60, Appendix A, the permittee 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.
2. The permittee shall collect and record the total annual usage, in tons/year, of coatings and inks in all flexographic, packaging rotogravure, and publication rotogravure printing lines at this facility.
3. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility VOC material usage and emissions:
 - a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the VOC content of each ink, as applied, in percent by weight;
 - g. the VOC content of each coating, as applied, in percent by weight;
 - h. the VOC content of each adhesive, as applied, in percent by weight;
 - i. the VOC content of each cleanup material, as applied, in percent by weight
 - j. the total VOC material usage of all inks, as applied, in pounds per month, i.e., $j = \sum[b \times f]$ for all inks;
 - k. the total VOC material usage of all coatings, as applied, in pounds per month, i.e., $k = \sum[c \times g]$ for all coatings;
 - l. the total VOC material usage of all adhesives, as applied, in pounds per month, i.e., $l = \sum[d \times h]$ for all adhesives;
 - m. the total VOC material usage of all cleanup materials, as applied, in pounds per month, i.e., $m = \sum[e \times i]$ for all cleanup materials;
 - n. the total VOC material usage of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;
 - o. the total VOC emissions of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;
 - p. the rolling, 12-month summation of the monthly total VOC material usage rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and

- q. the rolling, 12-month summation of the monthly total VOC emissions rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.
4. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility individual HAP material usages and emissions:
- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the individual HAP content for each HAP of each ink, as applied, in percent by weight;
 - g. the individual HAP content for each HAP of each coating, as applied, in percent by weight;
 - h. the individual HAP content for each HAP of each adhesive, as applied, in percent by weight;
 - i. the individual HAP content for each HAP of each cleanup material, as applied, in percent by weight;
 - j. the total individual HAP material usage for each HAP of all inks, as applied, in pounds per month, i.e., $j = \sum[b \times f]$ for all inks;
 - k. the total individual HAP material usage for each HAP of all coatings, as applied, in pounds per month, i.e., $k = \sum[c \times g]$ for all coatings;
 - l. the total individual HAP material usage for each HAP of all adhesives, as applied, in pounds per month, i.e., $l = \sum[d \times h]$ for all adhesives;
 - m. the total individual HAP material usage for each HAP of all cleanup materials, as applied, in pounds per month, i.e., $m = \sum[e \times i]$ for all cleanup materials;
 - n. the total individual HAP material usage for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;
 - o. the total individual HAP emissions for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;
 - p. the rolling, 12-month summation of the monthly individual HAP material usage rates for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and
 - q. the rolling, 12-month summation of the monthly individual HAP emissions rates for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.
5. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility combined HAP material usage and emissions:
- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the combined HAP content of each ink, as applied, in percent by weight;
 - g. the combined HAP content of each coating, as applied, in percent by weight;
 - h. the combined HAP content of each adhesive, as applied, in percent by weight;
 - i. the combined HAP content of each cleanup material, as applied, in percent by weight
 - j. the total combined HAP material usage of all inks, as applied, in pounds per month, i.e., $j = \sum[b \times f]$ for all inks;
 - k. the total combined HAP material usage of all coatings, as applied, in pounds per month, i.e., $k = \sum[c \times g]$ for all coatings;
 - l. the total combined HAP material usage of all adhesives, as applied, in pounds per month, i.e., $l = \sum[d \times h]$ for all adhesives;
 - m. the total combined HAP material usage of all cleanup materials, as applied, in pounds per month, i.e., $m = \sum[e \times i]$ for all cleanup materials;
 - n. the total combined HAP material usage of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;
 - o. the total combined HAP emissions of all inks, coatings, adhesives, and cleanup materials, as applied, in tons

per month, i.e., $o = n$, since emissions rate equals usage rate;

- p. the rolling, 12-month summation of the monthly total combined HAP material usage rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and
- q. the rolling, 12-month summation of the monthly total combined HAP emissions rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.

D. Reporting Requirements

1. If K001 is subject to OAC rule 3745-21-09(Y)(1), the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying inks and/or coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month of the occurrence.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the facility annual restricted allowable usage rates for all VOC & HAP materials employed using the methodology specified in Section C above, as well as the corrective actions that were taken to achieve compliance.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the facility 52.0 tpy VOCs, 9.0 tpy individual HAPs, and 22.2 tpy combined HAPs limitations (based upon a rolling, 12-month summation of the monthly emissions), as well as the corrective actions that were taken to achieve compliance.
4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitations: 6.36 lbs/hr & 27.9 tpy VOCs (K001).

Applicable Compliance Method: The above emissions limitations were established based on the unrestricted potential to emit, as shown in the following equations, using company-specified production/process data:

$$H = CV; \text{ and}$$

$$Y = HTW$$

Where,

$$H = 6.36 \text{ lbs/hr of VOCs [unrestricted hourly potential to emit];}$$

$$Y = 27.9 \text{ tpy VOC [unrestricted yearly potential to emit];}$$

$$C = 5.3 \text{ gallons/hour [company-specified maximum coating usage];}$$

$$V = 1.2 \text{ pound of VOC/gallon of coating company-specified maximum VOC content];}$$

$$T = 8760 \text{ hours/year [unrestricted operating schedule]; and}$$

$$W = 1 \text{ ton/2000 pounds.}$$

Emission Limitation: Forty per cent VOC by volume of each coating and ink, excluding water and exempt solvents; or Twenty-five per cent VOC by volume of the volatile matter in each coating and ink. (K001)

Applicable Compliance Method: The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Section C.1 of these terms and conditions.

USEPA Methods 24 and 24A, as applicable, shall be used to determine the VOC content for coatings, flexographic and rotogravure printing inks, and related coatings. If, pursuant to Methods 24 and 24A, 40 CFR Part 60, Appendix A, the permittee 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 Limitations: 52.0 tpy VOCs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.3 above.

For Section C.3 above, formulation data shall be used to determine the VOC content of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.

Emission Limitations: 9.0 tpy individual HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.4 above.

For Section C.4 above, formulation data shall be used to determine the individual HAP content for each HAP of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.

Emission Limitations: 22.2 tpy combined HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.5 above.

For Section C.5 above, formulation data shall be used to determine the combined HAP content of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. 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 changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
2. Until this permit expires, is revoked, is modified, or its requirements are superseded by another air permit, the facility-specific terms and conditions of this permit (e.g., facility emissions limits, facility VOC & HAP material usage restrictions, monitoring and record keeping of facility emissions and VOC & HAP material usages, deviation reporting, etc.), which were established in PTI 16-02350 (issued final July 22, 2004, modified September 22, 2005), shall apply to K001 through K003, K006, K007, K009 through K011, & P001, and shall supersede the facility-specific requirements contained in all previously issued air permits for this facility.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1677150028 Emissions Unit ID: K002 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>
66" x 170" 2-color flexographic printer slotter to print corrugated boxboard sheets to make shipping containers; air emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAP) uncontrolled and fugitive.	OAC rule 3745-31-05(A)(3) (PTI 16-01706)	VOC emissions shall not exceed 6.36 pounds per hour and 27.9 tons per year. The permittee shall only employ water-based inks in this emissions unit. See sections A.2 and B.1 through B.3 below for other requirements of OAC rule 3745-31-05(A)(3).
This facility includes a total of nine emissions units: K001 through K003, K006, K007, K009 through K011, & P001.	OAC rule 3745-21-09(Y)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(Y) and 3745-35-07(B). Per OAC rule 3745-21-09(Y)(1), the VOC content of the coatings and inks employed in this printing line shall not exceed the following limitation: Forty per cent VOC by volume of each coating and ink, excluding water and exempt solvents; or Twenty-five per cent VOC by volume of the volatile matter in each coating and ink.
	OAC rule 3745-35-07(B)	Per OAC rule 3745-21-09(Y)(2), K002 is exempt from the requirements of OAC rule 3745-21-09(Y)(1) if the total maximum usage of coatings and inks in all flexographic, packaging rotogravure, and publication rotogravure printing lines at this facility is less than or equal to one hundred forty-eight tons per year. See A.2.b below.

2. Additional Terms and Conditions

- (a) The VOC emissions limitations established pursuant to OAC rule 3745-31-05(A)(3) are based upon the potential to emit for this emissions unit. Therefore, no associated record keeping or reporting are

required to demonstrate compliance with these emissions limits.

However, if any proposed change(s), such as with production capacity, the types and/or quantities of materials used or processed, or anything else that increase(s) the potential emissions of any air pollutant, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

The total allowable emissions of Hazardous Air Pollutants (HAP), as identified in Section 112(b) of Title III of the Clean Air Act, from the nine sources in this permit (K001 through K003, K006, K007, K009 through K011, & P001) shall not exceed 9.0 tons/year for any single HAP and 22.2 tons/year for any combination of HAPs. VOC emissions for the nine emissions units in this permit are restricted to 52.0 tons/year. Compliance with the above limitations shall be based upon a rolling, 12-month summation.

B. Operational Restrictions

1. The maximum annual VOC material usage* (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 52.0 tons, based upon a rolling, 12-month summation of the VOC material usage figures.

*Annual VOC material usage rate (input) is equivalent to an annual VOC emissions rate and is based upon the solvent in the materials employed or applied being emitted.

2. The maximum annual individual HAP material usage** (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 9.0 tons, based upon a rolling, 12-month summation of the individual HAP material usage figures.

**Annual individual HAP material usage rate (input) is equivalent to an annual individual HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

3. The maximum annual combined HAP material usage rate*** (from inks, coatings, and adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 22.2 tons, based upon a rolling, 12-month summation of the combined HAP material usage figures.

***Annual combined HAP material usage rate (input) is equivalent to an annual combined HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for K002:

- a. the name and company identification of each ink and coating employed; and
- b. the VOC content in percentage VOC by volume of each coating and ink, excluding water and exempt solvents, or the VOC content in percentage VOC by volume of the volatile matter in each coating and ink.

USEPA Methods 24 and 24A, as applicable, shall be used to determine the VOC content for coatings, flexographic and rotogravure printing inks, and related coatings. If, pursuant to Methods 24 and 24A, 40 CFR Part 60, Appendix A, the permittee 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.

2. The permittee shall collect and record the total annual usage, in tons/year, of coatings and inks in all flexographic, packaging rotogravure, and publication rotogravure printing lines at this facility.

3. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility VOC material usage and emissions:

- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
- b. the weight, in pounds per month, of each ink, as applied;
- c. the weight, in pounds per month, of each coating, as applied;
- d. the weight, in pounds per month, of each adhesive, as applied;
- e. the weight, in pounds per month, of each cleanup material, as applied;
- f. the VOC content of each ink, as applied, in percent by weight;
- g. the VOC content of each coating, as applied, in percent by weight;
- h. the VOC content of each adhesive, as applied, in percent by weight;
- i. the VOC content of each cleanup material, as applied, in percent by weight
- j. the total VOC material usage of all inks, as applied, in pounds per month, i.e., $j = \sum[b \times f]$ for all inks;
- k. the total VOC material usage of all coatings, as applied, in pounds per month, i.e., $k = \sum[c \times g]$ for all coatings;
- l. the total VOC material usage of all adhesives, as applied, in pounds per month, i.e., $l = \sum[d \times h]$ for all adhesives;
- m. the total VOC material usage of all cleanup materials, as applied, in pounds per month, i.e., $m = \sum[e \times i]$ for all cleanup materials;
- n. the total VOC material usage of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;

- o. the total VOC emissions of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;
 - p. the rolling, 12-month summation of the monthly total VOC material usage rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and
 - q. the rolling, 12-month summation of the monthly total VOC emissions rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.
4. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility individual HAP material usages and emissions:
- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the individual HAP content for each HAP of each ink, as applied, in percent by weight;
 - g. the individual HAP content for each HAP of each coating, as applied, in percent by weight;
 - h. the individual HAP content for each HAP of each adhesive, as applied, in percent by weight;
 - i. the individual HAP content for each HAP of each cleanup material, as applied, in percent by weight;
 - j. the total individual HAP material usage for each HAP of all inks, as applied, in pounds per month, i.e., $j = \text{sum}[b \times f]$ for all inks;
 - k. the total individual HAP material usage for each HAP of all coatings, as applied, in pounds per month, i.e., $k = \text{sum}[c \times g]$ for all coatings;
 - l. the total individual HAP material usage for each HAP of all adhesives, as applied, in pounds per month, i.e., $l = \text{sum}[d \times h]$ for all adhesives;
 - m. the total individual HAP material usage for each HAP of all cleanup materials, as applied, in pounds per month, i.e., $m = \text{sum}[e \times i]$ for all cleanup materials;
 - n. the total individual HAP material usage for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;
 - o. the total individual HAP emissions for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;
 - p. the rolling, 12-month summation of the monthly individual HAP material usage rates for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and
 - q. the rolling, 12-month summation of the monthly individual HAP emissions rates for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.
5. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility combined HAP material usage and emissions:
- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the combined HAP content of each ink, as applied, in percent by weight;
 - g. the combined HAP content of each coating, as applied, in percent by weight;
 - h. the combined HAP content of each adhesive, as applied, in percent by weight;
 - i. the combined HAP content of each cleanup material, as applied, in percent by weight
 - j. the total combined HAP material usage of all inks, as applied, in pounds per month, i.e., $j = \text{sum}[b \times f]$ for all inks;
 - k. the total combined HAP material usage of all coatings, as applied, in pounds per month, i.e., $k = \text{sum}[c \times g]$ for all coatings;
 - l. the total combined HAP material usage of all adhesives, as applied, in pounds per month, i.e., $l = \text{sum}[d \times h]$ for all adhesives;
 - m. the total combined HAP material usage of all cleanup materials, as applied, in pounds per month, i.e., $m =$

sum[e x i] for all cleanup materials;

n. the total combined HAP material usage of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;

o. the total combined HAP emissions of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;

p. the rolling, 12-month summation of the monthly total combined HAP material usage rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and

q. the rolling, 12-month summation of the monthly total combined HAP emissions rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.

D. Reporting Requirements

1. If K002 is subject to OAC rule 3745-21-09(Y)(1), the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying inks and/or coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month of the occurrence.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the facility annual restricted allowable usage rates for all VOC & HAP materials employed using the methodology specified in Section C above, as well as the corrective actions that were taken to achieve compliance.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the facility 52.0 tpy VOCs, 9.0 tpy individual HAPs, and 22.2 tpy combined HAPs limitations (based upon a rolling, 12-month summation of the monthly emissions), as well as the corrective actions that were taken to achieve compliance.
4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitations: 6.36 lbs/hr & 27.9 tpy VOCs (K002).

Applicable Compliance Method: The above emissions limitations were established based on the unrestricted potential to emit, as shown in the following equations, using company-specified production/process data:

$H = CV$; and
 $Y = HTW$

Where,

$H = 6.36$ lbs/hr of VOCs [unrestricted hourly potential to emit];
 $Y = 27.9$ tpy VOC [unrestricted yearly potential to emit];
 $C = 5.3$ gallons/hour [company-specified maximum coating usage];
 $V = 1.2$ pound of VOC/gallon of coating company-specified maximum VOC content];
 $T = 8760$ hours/year [unrestricted operating schedule]; and
 $W = 1$ ton/2000 pounds.

Emission Limitation: Forty per cent VOC by volume of each coating and ink, excluding water and exempt solvents; or Twenty-five per cent VOC by volume of the volatile matter in each coating and ink. (K002)

Applicable Compliance Method: The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Section C.1 of these terms and conditions.

USEPA Methods 24 and 24A, as applicable, shall be used to determine the VOC content for coatings, flexographic and rotogravure printing inks, and related coatings. If, pursuant to Methods 24 and 24A, 40 CFR Part 60, Appendix A, the permittee 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 Limitations: 52.0 tpy VOCs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.3 above.

For Section C.3 above, formulation data shall be used to determine the VOC content of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.

Emission Limitations: 9.0 tpy individual HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.4 above.

For Section C.4 above, formulation data shall be used to determine the individual HAP content for each HAP of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.

Emission Limitations: 22.2 tpy combined HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.5 above.

2. **Additional Terms and Conditions**

- (a) The VOC emissions limitations established pursuant to OAC rule 3745-31-05(A)(3) are based upon the potential to emit for this emissions unit. Therefore, no associated record keeping or reporting are required to demonstrate compliance with these emissions limits.

However, if any proposed change(s), such as with production capacity, the types and/or quantities of materials used or processed, or anything else that increase(s) the potential emissions of any air pollutant, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

The total allowable emissions of Hazardous Air Pollutants (HAP), as identified in Section 112(b) of Title III of the Clean Air Act, from the nine sources in this permit (K001 through K003, K006, K007, K009 through K011, & P001) shall not exceed 9.0 tons/year for any single HAP and 22.2 tons/year for any combination of HAPs. VOC emissions for the nine emissions units in this permit are restricted to 52.0 tons/year. Compliance with the above limitations shall be based upon a rolling, 12-month summation.

B. **Operational Restrictions**

1. The maximum annual VOC material usage* (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 52.0 tons, based upon a rolling, 12-month summation of the VOC material usage figures.

*Annual VOC material usage rate (input) is equivalent to an annual VOC emissions rate and is based upon the solvent in the materials employed or applied being emitted.

2. The maximum annual individual HAP material usage** (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 9.0 tons, based upon a rolling, 12-month summation of the individual HAP material usage figures.

**Annual individual HAP material usage rate (input) is equivalent to an annual individual HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

3. The maximum annual combined HAP material usage rate*** (from inks, coatings, and adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 22.2 tons, based upon a rolling, 12-month summation of the combined HAP material usage figures.

***Annual combined HAP material usage rate (input) is equivalent to an annual combined HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

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

1. The permittee shall collect and record the following information each month for K003:

- a. the name and company identification of each ink and coating employed; and
- b. the VOC content in percentage VOC by volume of each coating and ink, excluding water and exempt solvents, or the VOC content in percentage VOC by volume of the volatile matter in each coating and ink.
- USEPA Methods 24 and 24A, as applicable, shall be used to determine the VOC content for coatings, flexographic and rotogravure printing inks, and related coatings. If, pursuant to Methods 24 and 24A, 40 CFR Part 60, Appendix A, the permittee 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.

2. The permittee shall collect and record the total annual usage, in tons/year, of coatings and inks in all flexographic, packaging rotogravure, and publication rotogravure printing lines at this facility.

3. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility VOC material usage and emissions:

- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
- b. the weight, in pounds per month, of each ink, as applied;
- c. the weight, in pounds per month, of each coating, as applied;
- d. the weight, in pounds per month, of each adhesive, as applied;
- e. the weight, in pounds per month, of each cleanup material, as applied;
- f. the VOC content of each ink, as applied, in percent by weight;
- g. the VOC content of each coating, as applied, in percent by weight;
- h. the VOC content of each adhesive, as applied, in percent by weight;
- i. the VOC content of each cleanup material, as applied, in percent by weight
- j. the total VOC material usage of all inks, as applied, in pounds per month, i.e., $j = \text{sum}[b \times f]$ for all inks;
- k. the total VOC material usage of all coatings, as applied, in pounds per month, i.e., $k = \text{sum}[c \times g]$ for all coatings;
- l. the total VOC material usage of all adhesives, as applied, in pounds per month, i.e., $l = \text{sum}[d \times h]$ for all adhesives;
- m. the total VOC material usage of all cleanup materials, as applied, in pounds per month, i.e., $m = \text{sum}[e \times i]$ for

- all cleanup materials;
- n. the total VOC material usage of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;
 - o. the total VOC emissions of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;
 - p. the rolling, 12-month summation of the monthly total VOC material usage rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and
 - q. the rolling, 12-month summation of the monthly total VOC emissions rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.
4. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility individual HAP material usages and emissions:
- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the individual HAP content for each HAP of each ink, as applied, in percent by weight;
 - g. the individual HAP content for each HAP of each coating, as applied, in percent by weight;
 - h. the individual HAP content for each HAP of each adhesive, as applied, in percent by weight;
 - i. the individual HAP content for each HAP of each cleanup material, as applied, in percent by weight;
 - j. the total individual HAP material usage for each HAP of all inks, as applied, in pounds per month, i.e., $j = \text{sum}[b \times f]$ for all inks;
 - k. the total individual HAP material usage for each HAP of all coatings, as applied, in pounds per month, i.e., $k = \text{sum}[c \times g]$ for all coatings;
 - l. the total individual HAP material usage for each HAP of all adhesives, as applied, in pounds per month, i.e., $l = \text{sum}[d \times h]$ for all adhesives;
 - m. the total individual HAP material usage for each HAP of all cleanup materials, as applied, in pounds per month, i.e., $m = \text{sum}[e \times i]$ for all cleanup materials;
 - n. the total individual HAP material usage for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;
 - o. the total individual HAP emissions for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;
 - p. the rolling, 12-month summation of the monthly individual HAP material usage rates for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and
 - q. the rolling, 12-month summation of the monthly individual HAP emissions rates for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.
5. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility combined HAP material usage and emissions:
- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the combined HAP content of each ink, as applied, in percent by weight;
 - g. the combined HAP content of each coating, as applied, in percent by weight;
 - h. the combined HAP content of each adhesive, as applied, in percent by weight;
 - i. the combined HAP content of each cleanup material, as applied, in percent by weight
 - j. the total combined HAP material usage of all inks, as applied, in pounds per month, i.e., $j = \text{sum}[b \times f]$ for all inks;
 - k. the total combined HAP material usage of all coatings, as applied, in pounds per month, i.e., $k = \text{sum}[c \times g]$ for all coatings;

- l. the total combined HAP material usage of all adhesives, as applied, in pounds per month, i.e., $l = \sum[d \times h]$ for all adhesives;
- m. the total combined HAP material usage of all cleanup materials, as applied, in pounds per month, i.e., $m = \sum[e \times i]$ for all cleanup materials;
- n. the total combined HAP material usage of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;
- o. the total combined HAP emissions of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;
- p. the rolling, 12-month summation of the monthly total combined HAP material usage rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and
- q. the rolling, 12-month summation of the monthly total combined HAP emissions rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.
- D. Reporting Requirements**
1. If K003 is subject to OAC rule 3745-21-09(Y)(1), the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying inks and/or coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month of the occurrence.
 2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the facility annual restricted allowable usage rates for all VOC & HAP materials employed using the methodology specified in Section C above, as well as the corrective actions that were taken to achieve compliance.
 3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the facility 52.0 tpy VOCs, 9.0 tpy individual HAPs, and 22.2 tpy combined HAPs limitations (based upon a rolling, 12-month summation of the monthly emissions), as well as the corrective actions that were taken to achieve compliance.
 4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions of this permit.
- E. Testing Requirements**
1. Compliance with the emission limitations in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitations: 6.36 lbs/hr & 27.9 tpy VOCs (K003).
- Applicable Compliance Method: The above emissions limitations were established based on the unrestricted potential to emit, as shown in the following equations, using company-specified production/process data:
- $H = CV$; and
 $Y = HTW$
- Where,
- $H = 6.36$ lbs/hr of VOCs [unrestricted hourly potential to emit];
 $Y = 27.9$ tpy VOC [unrestricted yearly potential to emit];
 $C = 5.3$ gallons/hour [company-specified maximum coating usage];
 $V = 1.2$ pound of VOC/gallon of coating company-specified maximum VOC content];
 $T = 8760$ hours/year [unrestricted operating schedule]; and
 $W = 1$ ton/2000 pounds.
- Emission Limitation: Forty per cent VOC by volume of each coating and ink, excluding water and exempt solvents; or Twenty-five per cent VOC by volume of the volatile matter in each coating and ink. (K003)
- Applicable Compliance Method: The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Section C.1 of these terms and conditions.
- USEPA Methods 24 and 24A, as applicable, shall be used to determine the VOC content for coatings, flexographic and rotogravure printing inks, and related coatings. If, pursuant to Methods 24 and 24A, 40 CFR Part 60, Appendix A, the permittee 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 Limitations: 52.0 tpy VOCs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)
- Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.3 above.
- For Section C.3 above, formulation data shall be used to determine the VOC content of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.
Emission Limitations: 9.0 tpy individual HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)
- Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.4 above.
- For Section C.4 above, formulation data shall be used to determine the individual HAP content for each HAP of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.
Emission Limitations: 22.2 tpy combined HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.5 above.

For Section C.5 above, formulation data shall be used to determine the combined HAP content of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. 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 changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
2. Until this permit expires, is revoked, is modified, or its requirements are superseded by another air permit, the facility-specific terms and conditions of this permit (e.g., facility emissions limits, facility VOC & HAP material usage restrictions, monitoring and record keeping of facility emissions and VOC & HAP material usages, deviation reporting, etc.), which were established in PTI 16-02350 (issued final July 22, 2004, modified September 22, 2005), shall apply to K001 through K003, K006, K007, K009 through K011, & P001, and shall supersede the facility-specific requirements contained in all previously issued air permits for this facility.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1677150028 Emissions Unit ID: K006 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>
Black Brothers Laminator with glue unit - application of cold-set adhesive to corrugated boxboard sheets to produce shipping containers, air emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAP) uncontrolled and fugitive.	OAC rule 3745-31-05(A)(3) (PTI 16-01706)	VOC emissions shall not exceed 1.17 pounds per hour and 5.1 tons per year. See sections A.2 and B.1 through B.3 below for other requirements of OAC rule 3745-31-05(A)(3). The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(F) and 3745-35-07(B).
This facility includes a total of nine emissions units: K001 through K003, K006, K007, K009 through K011, & P001.	OAC rule 3745-21-09(F)	The permittee shall not employ any adhesive with a VOC content in excess of 2.9 pounds of VOC per gallon of adhesive, excluding water and exempt solvents.
	OAC rule 3745-35-07(B)	The total allowable emissions of Hazardous Air Pollutants (HAP), as identified in Section 112(b) of Title III of the Clean Air Act, from the nine sources in this permit (K001 through K003, K006, K007, K009 through K011, & P001) shall not exceed 9.0 tons/year for any single HAP and 22.2 tons/year for any combination of HAPs. VOC emissions for the nine emissions units in this permit are restricted to 52.0 tons/year. Compliance with the above limitations shall be based upon a rolling, 12-month summation.

2. **Additional Terms and Conditions**

- (a) The VOC emissions limitations established pursuant to OAC rule 3745-31-05(A)(3) are based upon the potential to emit for this emissions unit. Therefore, no associated record keeping or reporting are required to demonstrate compliance with these emissions limits.

However, if any proposed change(s), such as with production capacity, the types and/or quantities of materials used or processed, or anything else that increase(s) the potential emissions of any air pollutant, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

B. Operational Restrictions

1. The maximum annual VOC material usage* (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 52.0 tons, based upon a rolling, 12-month summation of the VOC material usage figures.

*Annual VOC material usage rate (input) is equivalent to an annual VOC emissions rate and is based upon the solvent in the materials employed or applied being emitted.

2. The maximum annual individual HAP material usage** (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 9.0 tons, based upon a rolling, 12-month summation of the individual HAP material usage figures.

**Annual individual HAP material usage rate (input) is equivalent to an annual individual HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

3. The maximum annual combined HAP material usage rate*** (from inks, coatings, and adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 22.2 tons, based upon a rolling, 12-month summation of the combined HAP material usage figures.

***Annual combined HAP material usage rate (input) is equivalent to an annual combined HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for K006:
- a. The name and identification number of each coating, as applied.
 - b. The VOC content of each coating (excluding water and exempt solvents), as applied.
USEPA Method 24 shall be used to determine the VOC content of each coating, as applied.
2. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001):
- a. the name and identification number of each ink, coating, adhesive, and clean up materials employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the VOC content of each ink (excluding water and exempt solvents), as applied, in percent by weight;
 - g. the VOC content of each coating (excluding water and exempt solvents), as applied, in percent by weight;
 - h. the VOC content of each adhesive (excluding water and exempt solvents), as applied, in percent by weight;
 - i. the VOC content of each cleanup material (excluding water and exempt solvents), as applied, in percent by weight
 - j. the total VOC emissions from all inks, coatings, and adhesives $[(b \times f) + (x \times g) + (d \times h) + (e \times i)]$, in pounds per month;
 - k. the HAP content of each individual ink, as applied, in percent by weight;
 - l. the HAP content of each individual coating, as applied, in percent by weight;
 - m. the HAP content of each individual adhesive, as applied, in percent by weight;
 - n. the HAP content of each individual cleanup material, as applied, in percent by weight;
 - o. the total individual HAP emissions from all inks, coatings, adhesives, and cleanup materials employed $[(b \times k) + (x \times l) + (d \times m) + (e \times n)]$, in pounds per month;
 - p. the sum of each individual HAP content from all inks employed, as applied, in percent by weight;
 - q. the sum of each individual HAP content from all coatings employed, as applied, in percent by weight;
 - r. the sum of each individual HAP content from all adhesives employed, as applied, in percent by weight;
 - s. the sum of each individual HAP content from all cleanup materials employed, as applied, in percent by weight;
 - t. the total ink, coating, adhesive, and cleanup material usage, calculated by summing the records from (b), (c), and (d) in pounds per month;

- u. the rolling, 12-month summation of VOC emissions, from all inks, coatings, adhesives, cleanup materials employed in tons;
- v. the sum of all the individual combined HAP emissions from all inks, coatings, adhesives, and cleanup materials employed $[(b \times p) + x \times q) + (d \times r) + (e \times s)]$ (results in all combined HAP emissions), in pounds per month;
- w. the rolling, 12-month summation of individual HAP emissions, from all inks, coatings, adhesives, cleanup materials employed in tons; and
- x. the rolling, 12-month summation of combined HAP emissions, from all inks, coatings, adhesives, cleanup materials employed in tons.

D. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the calculated annual restricted allowable facility usage rates for all VOC-emitting & HAP-emitting materials proposed and actually employed using the methodology specified in Section C above, as well as the corrective actions that were taken to achieve compliance.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the facility 52.0 tpy VOCs, 9.0 tpy individual HAPs, and 22.2 tpy combined HAPs limitations (based upon a rolling, 12-month summation of the monthly emissions), as well as the corrective actions that were taken to achieve compliance.
4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation: 2.9 pounds of VOC per gallon of adhesive, excluding water and exempt solvents (K006).

Applicable Compliance Method: The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Section C.1 of these terms and conditions.

USEPA Method 24 shall be used to determine the VOC content for adhesives. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 cannot be used for a particular adhesive, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that adhesive to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

Emission Limitations: VOC emissions shall not exceed 1.17 pounds per hour and 5.1 tons per year.(K006)

Applicable Compliance Method: The above emissions limitations were established based on the unrestricted potential to emit, as shown in the following equations, using company-specified production/process data:

$$H = CV; \text{ and}$$

$$Y = HTW$$

Where,

H = 1.17 lbs/hr of VOCs [unrestricted hourly potential to emit];
 Y = 5.1 tpy VOC [unrestricted yearly potential to emit];
 C = 19.564 gallons/hour [company-specified maximum coating usage];
 V = 0.06 pound of VOC/gallon of coating company-specified maximum VOC content];
 T = 8760 hours/year [unrestricted operating schedule]; and
 W = 1 ton/2000 pounds.

Emission Limitations: 52.0 tpy VOCs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.2 above.

Emission Limitations: 9.0 tpy individual HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.2 above.

Emission Limitations: 22.2 tpy combined HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.2 above.

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. 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 changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
2. Until this permit expires, is revoked, is modified, or its requirements are superseded by another air permit, the facility-specific terms and conditions of this permit (e.g., facility emissions limits, facility VOC & HAP material

usage restrictions, monitoring and record keeping of facility emissions and VOC & HAP material usages, deviation reporting, etc.), which were established in PTI 16-02350 (issued final July 22, 2004, modified September 22, 2005), shall apply to K001 through K003, K006, K007, K009 through K011, & P001, and shall supersede the facility-specific requirements contained in all previously issued air permits for this facility.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1677150028 Emissions Unit ID: K007 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>
Application of cold-set adhesive to corrugated boxboard sheets to produce shipping containers, air emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAP) uncontrolled and fugitive.	OAC rule 3745-31-05(A)(3) (PTI 16-01856)	VOC emissions shall not exceed 2.37 pounds per hour and 10.4 tons per year.
This facility includes a total of nine emissions units: K001 through K003, K006, K007, K009 through K011, & P001.		See sections A.2 and B.1 through B.3 below for other requirements of OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-09(F)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(F) and 3745-35-07(B).
	OAC rule 3745-35-07(B)	The permittee shall not employ any adhesive with a VOC content in excess of 2.9 pounds of VOC per gallon of adhesive, excluding water and exempt solvents. The total allowable emissions of Hazardous Air Pollutants (HAP), as identified in Section 112(b) of Title III of the Clean Air Act, from the nine sources in this permit (K001 through K003, K006, K007, K009 through K011, & P001) shall not exceed 9.0 tons/year for any single HAP and 22.2 tons/year for any combination of HAPs. VOC emissions for the nine emissions units in this permit are restricted to 52.0 tons/year. Compliance with the above limitations shall be based upon a rolling, 12-month summation.

2. Additional Terms and Conditions

- (a) The VOC emissions limitations established pursuant to OAC rule 3745-31-05(A)(3) are based upon the potential to emit for this emissions unit. Therefore, no associated record keeping or reporting are required to demonstrate compliance with these emissions limits.

However, if any proposed change(s), such as with production capacity, the types and/or quantities of materials used or processed, or anything else that increase(s) the potential emissions of any air pollutant, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

B. Operational Restrictions

1. The maximum annual VOC material usage* (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 52.0 tons, based upon a rolling, 12-month summation of the VOC material usage figures.

*Annual VOC material usage rate (input) is equivalent to an annual VOC emissions rate and is based upon the solvent in the materials employed or applied being emitted.
2. The maximum annual individual HAP material usage** (from inks, coatings, adhesive, and clean up materials) for

K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 9.0 tons, based upon a rolling, 12-month summation of the individual HAP material usage figures.

**Annual individual HAP material usage rate (input) is equivalent to an annual individual HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

3. The maximum annual combined HAP material usage rate*** (from inks, coatings, and adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 22.2 tons, based upon a rolling, 12-month summation of the combined HAP material usage figures.

***Annual combined HAP material usage rate (input) is equivalent to an annual combined HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for K007:
 - a. The name and identification number of each coating, as applied.
 - b. The VOC content of each coating (excluding water and exempt solvents), as applied.
USEPA Method 24 shall be used to determine the VOC content of each coating, as applied.
2. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001):
 - a. the name and identification number of each ink, coating, adhesive, and clean up materials employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the VOC content of each ink (excluding water and exempt solvents), as applied, in percent by weight;
 - g. the VOC content of each coating (excluding water and exempt solvents), as applied, in percent by weight;
 - h. the VOC content of each adhesive (excluding water and exempt solvents), as applied, in percent by weight;
 - i. the VOC content of each cleanup material (excluding water and exempt solvents), as applied, in percent by weight
 - j. the total VOC emissions from all inks, coatings, and adhesives $[(b \times f) + (x \times g) + (d \times h) + (e \times i)]$, in pounds per month;
 - k. the HAP content of each individual ink, as applied, in percent by weight;
 - l. the HAP content of each individual coating, as applied, in percent by weight;
 - m. the HAP content of each individual adhesive, as applied, in percent by weight;
 - n. the HAP content of each individual cleanup material, as applied, in percent by weight;
 - o. the total individual HAP emissions from all inks, coatings, adhesives, and cleanup materials employed $[(b \times k) + (x \times l) + (d \times m) + (e \times n)]$, in pounds per month;
 - p. the sum of each individual HAP content from all inks employed, as applied, in percent by weight;
 - q. the sum of each individual HAP content from all coatings employed, as applied, in percent by weight;
 - r. the sum of each individual HAP content from all adhesives employed, as applied, in percent by weight;
 - s. the sum of each individual HAP content from all cleanup materials employed, as applied, in percent by weight;
 - t. the total ink, coating, adhesive, and cleanup material usage, calculated by summing the records from (b), (c), and (d) in pounds per month;
 - u. the rolling, 12-month summation of VOC emissions, from all inks, coatings, adhesives, cleanup materials employed in tons;
 - v. the sum of all the individual combined HAP emissions from all inks, coatings, adhesives, and cleanup materials employed $[(b \times p) + (x \times q) + (d \times r) + (e \times s)]$ (results in all combined HAP emissions), in pounds per month;
 - w. the rolling, 12-month summation of individual HAP emissions, from all inks, coatings, adhesives, cleanup materials employed in tons; and
 - x. the rolling, 12-month summation of combined HAP emissions, from all inks, coatings, adhesives, cleanup materials employed in tons.
3. The permit to install for this emissions unit was evaluated based on the actual process 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 Toxics 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: vinyl acetate (CAS 108-05-4)
 TLV (ug/m3): 35,000
 Maximum Hourly Emission Rate (lbs/hr): 2.37
 Predicted 1-Hour Maximum Ground-Level Concentration at 71 m (ug/m3): 250
 MAGLC (ug/m3): 833

4. Physical changes to or changes in the method of operation of the emissions unit after its 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 Toxics Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxics Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxics Policy" include the following:
 - i. changes in the composition of the materials used (process materials and 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;
 - ii 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
 - iii 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 Toxics 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the emissions unit, if changed as outlined above, will still satisfy the "Air Toxics 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 Toxics Policy"; and
 - c. where computer modeling is performed, 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 Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the calculated annual restricted allowable facility usage rates for all VOC-emitting & HAP-emitting materials proposed and actually employed using the methodology specified in Section C above, as well as the corrective actions that were taken to achieve compliance.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the facility 52.0 tpy VOCs, 9.0 tpy individual HAPs, and 22.2 tpy combined HAPs limitations (based upon a rolling, 12-month summation of the monthly emissions), as well as the corrective actions that were taken to achieve compliance.
4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:
 Emission Limitation: 2.9 pounds of VOC per gallon of adhesive, excluding water and exempt solvents (K007).

Applicable Compliance Method: The permittee shall demonstrate compliance with the above limit based upon the record keeping requirements of Section C.1 of these terms and conditions.

USEPA Method 24 shall be used to determine the VOC content for adhesives. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 cannot be used for a particular adhesive, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that adhesive to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.
 Emission Limitations: 2.37 lbs/hr & 10.4 tpy VOCs (K007).

Applicable Compliance Method: The above emissions limitations were established based on the unrestricted potential to emit, as shown in the following equations, using company-specified process data:

H = PGO; and
 Y = HTW

Where,

H = 2.37 lbs/hr of VOCs [unrestricted hourly potential to emit];
 Y = 10.4 tpy VOCs [unrestricted yearly potential to emit];
 P = 22 msf/hr [company-specified rated production capacity];
 G = 14.67 lbs glue/msf [company-specified process factor];
 O = 0.00734 lb VOCs/lb glue [company-specified emission factor];
 T = 8760 hours/year [unrestricted operating schedule]; and
 W = 1 ton/2000 pounds [weight conversion].
 Emission Limitations: 52.0 tpy VOCs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.2 above.

Emission Limitations: 9.0 tpy individual HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.2 above.

Emission Limitations: 22.2 tpy combined HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.2 above.

F. Miscellaneous Requirements

1. Until this permit expires, is revoked, is modified, or its requirements are superseded by another air permit, the facility-specific terms and conditions of this permit (e.g., facility emissions limits, facility VOC & HAP material usage restrictions, monitoring and record keeping of facility emissions and VOC & HAP material usages, deviation reporting, etc.), which were established in PTI 16-02350 (issued final July 22, 2004, modified September 22, 2005), shall apply to K001 through K003, K006, K007, K009 through K011, & P001, and shall supersede the facility-specific requirements contained in all previously issued air permits for this facility.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1677150028 Emissions Unit ID: P001 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>
Starch storage silo, supplies corn starch to the starch kitchen; particulate emissions (PE) vented to and controlled by a fabric filter (baghouse). This facility includes a total of nine emissions units: K001 through K003, K006, K007, K009 through K011, & P001.	OAC rule 3745-31-05(A)(3) (PTI 16-01706) OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)	Stack PE shall not exceed 0.69 pound/hour and 3.0 tons/year. Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average. The permittee shall operate and maintain the baghouse serving this emissions unit in accordance with the manufacturer's specifications, instructions and operating manual(s). See sections A.2 and B.1 through B.5 below for other requirements of OAC rule 3745-31-05(A)(3). The requirements of this rule also include compliance with the requirements of OAC rule 3745-35-07(B). The emissions limitations specified by these rules are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-35-07(B)

See A.2.b below.

2. Additional Terms and Conditions

- (a) The PE limits established pursuant to OAC rule 3745-31-05(A)(3) are based upon the potential to emit of this emissions unit. Therefore, no monitoring, record keeping, or reporting requirements are necessary to ensure ongoing compliance with these emissions limits.

However, the permittee shall apply for and, if required, obtain a final permit to install prior to equipment replacement or any proposed modification of equipment or production procedures, materials processed, or any other change that would increase the potential emissions of any air pollutant.

The total allowable emissions of Hazardous Air Pollutants (HAP), as identified in Section 112(b) of Title III of the Clean Air Act, from the nine sources in this permit (K001 through K003, K006, K007, K009 through K011, & P001) shall not exceed 9.0 tons/year for any single HAP and 22.2 tons/year for any combination of HAPs. VOC emissions for the nine emissions units in this permit are restricted to 52.0 tons/year. Compliance with the above limitations shall be based upon a rolling, 12-month summation.

B. Operational Restrictions

1. The maximum annual VOC material usage* (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 52.0 tons, based upon a rolling, 12-month summation of the VOC material usage figures.

*Annual VOC material usage rate (input) is equivalent to an annual VOC emissions rate and is based upon the solvent in the materials employed or applied being emitted.

2. The maximum annual individual HAP material usage** (from inks, coatings, adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 9.0 tons, based upon a rolling, 12-month summation of the individual HAP material usage figures.

**Annual individual HAP material usage rate (input) is equivalent to an annual individual HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

3. The maximum annual combined HAP material usage rate*** (from inks, coatings, and adhesive, and clean up materials) for K001 through K003, K006, K007, K009 through K011, & P001 shall not exceed 22.2 tons, based upon a rolling, 12-month summation of the combined HAP material usage figures.

***Annual combined HAP material usage rate (input) is equivalent to an annual combined HAP emissions rate and is based upon the solvent in the materials employed or applied being emitted.

4. The permittee shall employ the baghouse serving this emissions unit at all times the emissions unit is in operation.
5. The permittee shall only store corn starch in the emissions unit.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall document when the baghouse serving this emissions unit was not in service when the emissions unit was in operation.

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when weather conditions allow, for any visible particulate emissions from the emissions unit and/or the baghouse serving this emissions unit. The presence or absence of any visible particulate emissions from the emissions unit and/or baghouse shall be noted weekly in an operations log. If visible particulate emissions are observed, the permittee shall also note the following in an operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the determined cause of the abnormal emissions if a cause can be determined upon investigation;
- d. the total duration of the visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

3. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility VOC material usage and emissions:

- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
- b. the weight, in pounds per month, of each ink, as applied;
- c. the weight, in pounds per month, of each coating, as applied;
- d. the weight, in pounds per month, of each adhesive, as applied;
- e. the weight, in pounds per month, of each cleanup material, as applied;
- f. the VOC content of each ink, as applied, in percent by weight;
- g. the VOC content of each coating, as applied, in percent by weight;
- h. the VOC content of each adhesive, as applied, in percent by weight;
- i. the VOC content of each cleanup material, as applied, in percent by weight
- j. the total VOC material usage of all inks, as applied, in pounds per month, i.e., $j = \text{sum}[b \times f]$ for all inks;
- k. the total VOC material usage of all coatings, as applied, in pounds per month, i.e., $k = \text{sum}[c \times g]$ for all coatings;

- l. the total VOC material usage of all adhesives, as applied, in pounds per month, i.e., $l = \text{sum}[d \times h]$ for all adhesives;
 - m. the total VOC material usage of all cleanup materials, as applied, in pounds per month, i.e., $m = \text{sum}[e \times i]$ for all cleanup materials;
 - n. the total VOC material usage of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;
 - o. the total VOC emissions of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;
 - p. the rolling, 12-month summation of the monthly total VOC material usage rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and
 - q. the rolling, 12-month summation of the monthly total VOC emissions rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.
4. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility individual HAP material usages and emissions:
- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the individual HAP content for each HAP of each ink, as applied, in percent by weight;
 - g. the individual HAP content for each HAP of each coating, as applied, in percent by weight;
 - h. the individual HAP content for each HAP of each adhesive, as applied, in percent by weight;
 - i. the individual HAP content for each HAP of each cleanup material, as applied, in percent by weight;
 - j. the total individual HAP material usage for each HAP of all inks, as applied, in pounds per month, i.e., $j = \text{sum}[b \times f]$ for all inks;
 - k. the total individual HAP material usage for each HAP of all coatings, as applied, in pounds per month, i.e., $k = \text{sum}[c \times g]$ for all coatings;
 - l. the total individual HAP material usage for each HAP of all adhesives, as applied, in pounds per month, i.e., $l = \text{sum}[d \times h]$ for all adhesives;
 - m. the total individual HAP material usage for each HAP of all cleanup materials, as applied, in pounds per month, i.e., $m = \text{sum}[e \times i]$ for all cleanup materials;
 - n. the total individual HAP material usage for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;
 - o. the total individual HAP emissions for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;
 - p. the rolling, 12-month summation of the monthly individual HAP material usage rates for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and
 - q. the rolling, 12-month summation of the monthly individual HAP emissions rates for each HAP of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.
5. The permittee shall collect and record the following information each month for the facility (K001 through K003, K006, K007, K009 through K011, & P001) to determine facility combined HAP material usage and emissions:
- a. the name and identification number of each ink, coating, adhesive, and cleanup material employed;
 - b. the weight, in pounds per month, of each ink, as applied;
 - c. the weight, in pounds per month, of each coating, as applied;
 - d. the weight, in pounds per month, of each adhesive, as applied;
 - e. the weight, in pounds per month, of each cleanup material, as applied;
 - f. the combined HAP content of each ink, as applied, in percent by weight;
 - g. the combined HAP content of each coating, as applied, in percent by weight;
 - h. the combined HAP content of each adhesive, as applied, in percent by weight;
 - i. the combined HAP content of each cleanup material, as applied, in percent by weight;
 - j. the total combined HAP material usage of all inks, as applied, in pounds per month, i.e., $j = \text{sum}[b \times f]$ for all inks;

- k. the total combined HAP material usage of all coatings, as applied, in pounds per month, i.e., $k = \text{sum}[c \times g]$ for all coatings;
- l. the total combined HAP material usage of all adhesives, as applied, in pounds per month, i.e., $l = \text{sum}[d \times h]$ for all adhesives;
- m. the total combined HAP material usage of all cleanup materials, as applied, in pounds per month, i.e., $m = \text{sum}[e \times i]$ for all cleanup materials;
- n. the total combined HAP material usage of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $n = [j + k + l + m]/2000$;
- o. the total combined HAP emissions of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per month, i.e., $o = n$, since emissions rate equals usage rate;
- p. the rolling, 12-month summation of the monthly total combined HAP material usage rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year; and
- q. the rolling, 12-month summation of the monthly total combined HAP emissions rates of all inks, coatings, adhesives, and cleanup materials, as applied, in tons per year, i.e., $q = p$, since emissions rate equals usage rate.

D. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that the baghouse serving this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the facility annual restricted allowable usage rates for all VOC & HAP materials employed using the methodology specified in Section C above, as well as the corrective actions that were taken to achieve compliance.
3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the facility 52.0 tpy VOCs, 9.0 tpy individual HAPs, and 22.2 tpy combined HAPs limitations (based upon a rolling, 12-month summation of the monthly emissions), as well as the corrective actions that were taken to achieve compliance.
4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Terms and Conditions of this permit.
5. The permittee shall submit on a semiannual basis a report which (a) identifies all days during which any visible particulate emissions were observed from the emissions unit and/or any baghouse serving this emissions unit and (b) describes the corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted by January 31 and July 31 of each year to the Director (District Office or local air agency).

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
 Emission Limitation: Visible PE from any stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

 Applicable Compliance Method: If required, compliance shall be determined by visible emission evaluations performed in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).
 Emission Limitation: Stack PE shall not exceed 0.69 pound/hour and 3.0 tons/year.

 Applicable Compliance Method: If required, compliance shall be determined in accordance with the requirements in 40 CFR Part 60, Appendix A, Method 5 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).
 Emission Limitations: 52.0 tpy VOCs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

 Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.3 above.

 For Section C.3 above, formulation data shall be used to determine the VOC content of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.
 Emission Limitations: 9.0 tpy individual HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility (K001 through K003, K006, K007, K009 through K011, & P001)

 Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.4 above.

 For Section C.4 above, formulation data shall be used to determine the individual HAP content for each HAP of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.
 Emission Limitations: 22.2 tpy combined HAPs, based upon a rolling, 12-month summation of the monthly emissions from this facility K001 through K003, K006, K007, K009 through K011, & P001)

 Applicable Compliance Method: Compliance shall be based upon the record keeping requirements of section C.5 above.

 For Section C.5 above, formulation data shall be used to determine the combined HAP content of each coating, flexographic and rotogravure printing ink, adhesive, cleanup material, and related coating employed.

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. 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 changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.
2. Until this permit expires, is revoked, is modified, or its requirements are superseded by another air permit, the facility-specific terms and conditions of this permit (e.g., facility emissions limits, facility VOC & HAP material usage restrictions, monitoring and record keeping of facility emissions and VOC & HAP material usages, deviation reporting, etc.), which were established in PTI 16-02350 (issued final July 22, 2004, modified September 22, 2005), shall apply to K001 through K003, K006, K007, K009 through K011, & P001, and shall supersede the facility-specific requirements contained in all previously issued air permits for this facility.