

Facility ID: 1318532181 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.

- [Go to Part II for Emissions Unit K002](#)
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Facility ID: 1318532181 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>
non-heatset, web, offset lithographic printing press (no. 1) with electronic beam and ultraviolet curing (radiation)	OAC rule 3745-31-05(A)(3) (PTI # 13-2019 issued January 24, 1990) OAC rule 3745-21-07(G)(2)	OC emissions from the fountain solution organic compound additives (FSOCA), including isopropanol, shall not exceed 5.0 pounds/hour and 20.5 tons/year. Organic compound emissions shall not exceed 8 pounds/hour and 40 pounds/day from all coatings and photochemically reactive cleanup materials, on any day when photochemically reactive materials are employed.
	OAC rule 3745-35-07(B) Synthetic Minor to avoid Title V and MACT	Organic compound and volatile organic compound (OC/VOC) emissions from the facility shall not exceed 97.1 tons per rolling 12-month period.

See section A.2.a.

2. **Additional Terms and Conditions**
 - (a) The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, based on a rolling, 12-month summation of emissions.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance. The facility-wide emission limits shall include emissions from the following units: K002, K003, K008, K009, K010, K011, K012, P001, P002, B002, and five De Minimis gluers.

B. Operational Restrictions

1. The maximum annual OC/VOC emissions for the facility (See A.2.b) shall not exceed 97.1 tons, based upon a rolling 12-month summation of the monthly OC/VOC emissions.
2. The maximum annual HAP material usage for the facility (See A.2.b) shall be restricted and monitored so that HAP emissions shall not exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based upon a rolling 12-month summation of the emissions.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. the company identification for each coating, ink, fountain solution organic compound additive (FSOCA) and cleanup material employed and a record indicating whether each material is photochemically reactive or nonphotochemically reactive;

- b. the number of pounds of each FSOCA employed;
 - c. the organic compound content of each FSOCA, in weight percent;
 - d. the total OC emission rate from all FSOCA, in pounds per day;
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly organic compound emission rate for all FSOCA, (i.e., the sum of (b)x(c)/(e)), in pounds per hour (average).
2. The permittee shall collect and record the following information for each day when any photochemically reactive material is employed in this emissions unit:
- a. the number of pounds of each coating, ink, FSOCA and photochemically reactive cleanup material employed;
 - b. the organic compound content of each coating, ink, FSOCA and photochemically reactive cleanup material employed, in weight percent;
 - c. the total OC emission rate from all inks, coatings, FSOCA and photochemically reactive cleanup materials, in pounds per day (based on a 95% solvent retention factor for inks and a 0% solvent retention factor for other materials); and
 - d. the average hourly organic compound emission rate for all coatings, inks, FSOCA and all cleanup materials (i.e., the value calculated in 2.c divided by the operating hours recorded in C.1.e.).
3. The permittee shall collect and record the following information for each month for this emissions unit:
- a. the number of pounds of each coating, ink, FSOCA, and cleanup material employed;
 - b. the organic compound content of each coating, ink, FSOCA and cleanup material, in weight percent; and
 - c. the total OC emission rate from all inks, coatings, FSOCA and photochemically reactive cleanup materials, in pounds per month (based on a 95% solvent retention factor for inks and a 0% solvent retention factor for other materials).
4. The permittee shall record the total OC emission rate from all inks, coatings, FSOCA and cleanup materials for each calendar year, in tons.
5. The permittee shall collect and record the following information each month for this facility:
- a. the name and identification number of each ink, fountain solution and coating, employed;
 - b. the OC/VOC content of each ink, fountain solution and coating, in pounds per gallon;
 - c. the individual hazardous air pollutant (*HAP) content for each HAP of each ink, fountain solution and coating in pounds of individual HAP per gallon of coating, as applied;
 - d. the total combined HAP content of each coating in pounds of combined HAPs per gallon of ink, fountain solution and coating, as applied [sum all the individual HAP contents from (c)];
 - e. the amount, in gallons, of each ink, fountain solution and coating employed;
 - f. the name and identification of each cleanup material employed;
 - g. the OC/VOC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (h)];
 - j. the amount, in gallons, of each cleanup material employed;
 - k. the total OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) x (100% - solvent retention factor**)] for each ink/coating /fountain solution, plus (g) x (j) for each cleanup material], in pounds and tons per month;
 - l. the total volatile organic material usage for all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) plus (g) x (j)] for each ink, coating, fountain solution and cleanup material, in pounds and tons per month;
 - m. the updated rolling, 12-month summation of volatile organic material usage and OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed, in tons (this shall include the information for the current month and the preceding eleven calendar months);
 - n. the total individual HAP emissions for each HAP from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (c) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution, plus the sum of (h) x (j) for each cleanup material];
 - o. the total combined HAP emissions from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [the sum of (d) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution plus the sum of (i) x (j) for each cleanup material];
 - p. the updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons (this

shall include the information for the current month and the preceding eleven calendar months); and

q. the updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months).

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Local Air Agency contact. This information does not have to be kept on an individual emissions unit basis.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that include the following information for this emissions unit:
 - a. An identification of each day during which the average hourly organic compound emissions from the FSOCA exceeded 5.0 pounds/hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the permittee employed photochemically reactive cleanup materials, and the organic compound emissions from the inks, coatings, FSOCA and photochemically reactive cleanup materials exceeded 40 pounds/day, and the actual organic compound emission rate for each such day.
 - c. An identification of each day during which the permittee employed photochemically reactive cleanup materials, and the organic compound emissions from the inks, coatings, FSOCA and photochemically reactive cleanup materials exceeded 8 pounds/hr, and the actual average hourly organic compound emission rate.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Term and Condition A.1.c.ii.
2. The permittee shall submit deviation (excursion) reports which include the following information for the facility (see A.2.b):
 - a. an identification of each month during which the rolling, 12-month individual HAP emissions exceed 9.9 tons/yr based on a rolling, 12-month summation;
 - b. an identification of each month during which the rolling, 12-month combined HAP emissions exceed 24.9 tons/yr based on a rolling, 12-month summation; and
 - c. an identification of each month during which the rolling, 12-month OC/VOC emissions exceed 97.1 tons/yr based on a rolling, 12-month summation.

The deviation (excursion) report shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.
3. The permittee shall submit annual reports that include the total OC emissions, in tons for this emissions unit. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
OC emissions from FSOCA shall not exceed 5.0 pounds/hour.

Applicable Compliance Method:
Compliance may be determined based upon the recordkeeping requirement in section C.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

Emission Limitation:
OC emissions from FSOCA shall not exceed 20.5 tons/year.

Applicable Compliance Method:
Compliance may be determined based upon the recordkeeping requirement in section C.3 and 4.

Emission Limitation:
Organic compound emissions shall not exceed 8 pounds/hour and 40 pounds/day from all coatings and photochemically reactive cleanup materials, on any day when photochemically reactive materials are employed in this emissions unit.

Applicable Compliance Method:
Compliance may be determined based upon the recordkeeping requirement in section C.2.

Emission Limitation:
97.1 tons OC/VOC per rolling, 12-month period for this facility

Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in section C.5 and 6.

Emission Limitation:
9.9 tons individual HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in section C.6.

Emission Limitation:
24.9 tons combined HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in section C.6.
2. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and

related coatings) shall be used to determine the OC contents of the coatings and inks. Formulation data shall be used to determine the OC contents of the FSOCA and cleanup materials.

F. Miscellaneous Requirements

1. PTI #13-02019 issued January 24, 1990 included a limitation for visible emissions. The permittee has demonstrated that this emissions unit is not a source of particulate emissions. Further, the emissions unit does not have a stack or equivalent opening from which visible particulate emissions could be monitored.

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Facility ID: 1318532181 Emissions Unit ID: K003 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
non-heatset, web, offset lithographic printing press (no.2) with electronic beam and ultraviolet curing (radiation)	OAC rule 3745-31-05(A)(3) (PTI # 13-2213 issued March 27, 1991) OAC rule 3745-21-07(G)(2)	OC emissions from the fountain solution organic compound additives (FSOCA), including isopropanol, shall not exceed 5.0 pounds/hour and 20.02 tons/year. Organic compound emissions shall not exceed 8 pounds/hour and 40 pounds/day from all coatings and photochemically reactive cleanup materials, on any day when photochemically reactive materials are employed.
	OAC rule 3745-35-07(B) Synthetic Minor to avoid Title V and MACT	Organic compound and volatile organic compound (OC/VOC) emissions from the facility shall not exceed 97.1 tons per rolling 12-month period.

See section A.2.a.

2. **Additional Terms and Conditions**
 - (a) The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, based on a rolling, 12-month summation of emissions.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance. The facility-wide emission limits shall include emissions from the following units: K002, K003, K008, K009, K010, K011, K012, P001, P002, B002, and five De Minimis gluers.

B. Operational Restrictions

1. The maximum annual OC/VOC emissions for the facility (See A.2.b) shall not exceed 97.1 tons, based upon a rolling 12-month summation of the monthly OC/VOC emissions.
2. The maximum annual HAP material usage for the facility (See A.2.b) shall be restricted and monitored so that HAP emissions shall not exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based upon a rolling 12-month summation of the emissions.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. the company identification for each coating, ink, fountain solution organic compound additive (FSOCA) and cleanup material employed and a record indicating whether each material is photochemically reactive or nonphotochemically reactive;
 - b. the number of pounds of each FSOCA employed;
 - c. the organic compound content of each FSOCA, in weight percent;

- d. the total OC emission rate from all FSOCAs, in pounds per day;
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly organic compound emission rate for all FSOCAs, (i.e., the sum of (b)x(c)/(e)), in pounds per hour (average).
2. The permittee shall collect and record the following information for each day when any photochemically reactive material is employed in this emissions unit:
 - a. the number of pounds of each coating, ink, FSOCA and photochemically reactive cleanup material employed;
 - b. the organic compound content of each coating, ink, FSOCA and photochemically reactive cleanup material employed, in weight percent;
 - c. the total OC emission rate from all inks, coatings, FSOCA and photochemically reactive cleanup materials, in pounds per day (based on a 95% solvent retention factor for inks and a 0% solvent retention factor for other materials); and
 - d. the average hourly organic compound emission rate for all coatings, inks, FSOCA and all cleanup materials (i.e., the value calculated in 2.c divided by the operating hours recorded in C.1.e.).
3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the number of pounds of each coating, ink, FSOCA, and cleanup material employed;
 - b. the organic compound content of each coating, ink, FSOCA and cleanup material, in weight percent; and
 - c. the total OC emission rate from all inks, coatings, FSOCA and photochemically reactive cleanup materials, in pounds per month (based on a 95% solvent retention factor for inks and a 0% solvent retention factor for other materials).
4. The permittee shall record the total OC emission rate from all inks, coatings, FSOCA and cleanup materials for each calendar year, in tons.
5. The permittee shall collect and record the following information each month for this facility:
 - a. the name and identification number of each ink, fountain solution and coating, employed;
 - b. the OC/VOC content of each ink, fountain solution and coating, in pounds per gallon;
 - c. the individual hazardous air pollutant (*HAP) content for each HAP of each ink, fountain solution and coating in pounds of individual HAP per gallon of coating, as applied;
 - d. the total combined HAP content of each coating in pounds of combined HAPs per gallon of ink, fountain solution and coating, as applied [sum all the individual HAP contents from (c)];
 - e. the amount, in gallons, of each ink, fountain solution and coating employed;
 - f. the name and identification of each cleanup material employed;
 - g. the OC/VOC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (h)];
 - j. the amount, in gallons, of each cleanup material employed;
 - k. the total OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) x (100% - solvent retention factor**)] for each ink/coating/fountain solution, plus (g) x (j) for each cleanup material], in pounds and tons per month;
 - l. the total volatile organic material usage for all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) plus (g) x (j)] for each ink, coating, fountain solution and cleanup material, in pounds and tons per month;
 - m. the updated rolling, 12-month summation of volatile organic material usage and OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed, in tons (this shall include the information for the current month and the preceding eleven calendar months);
 - n. the total individual HAP emissions for each HAP from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (c) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution, plus the sum of (h) x (j) for each cleanup material];
 - o. the total combined HAP emissions from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [the sum of (d) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution plus the sum of (i) x (j) for each cleanup material];
 - p. the updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months); and
 - q. the updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months).

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Local Air Agency contact. This information does not have to be kept on an individual emissions unit basis.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that include the following information for this emissions unit:
 - a. An identification of each day during which the average hourly organic compound emissions from the FSOCA exceeded 5.0 pounds/hour, and the actual average hourly organic compound emissions for each such day.
 - b. An identification of each day during which the permittee employed photochemically reactive cleanup materials, and the organic compound emissions from the inks, coatings, FSOCAs and photochemically reactive cleanup materials exceeded 40 pounds/day, and the actual organic compound emission rate for each such day.
 - c. An identification of each day during which the permittee employed photochemically reactive cleanup materials, and the organic compound emissions from the inks, coatings, FSOCAs and photochemically reactive cleanup materials exceeded 8 pounds/hr, and the actual average hourly organic compound emission rate.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Term and Condition A.1.c.ii.
2. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which include the following information for the facility (see A.2.b):
 - a. an identification of each month during which the rolling, 12-month individual HAP emissions exceed 9.9 tons/yr based on a rolling, 12-month summation;
 - b. an identification of each month during which the rolling, 12-month combined HAP emissions exceed 24.9 tons/yr based on a rolling, 12-month summation; and
 - c. an identification of each month during which the rolling, 12-month OC/VOC emissions exceed 97.1 tons/yr based on a rolling, 12-month summation.

The deviation (excursion) report shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.
3. The permittee shall submit annual reports to the Cleveland DAQ that include the total OC emissions, in tons for this emissions unit. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
OC emissions from FSOCA shall not exceed 5.0 pounds/hour.

Applicable Compliance Method:
Compliance may be determined based upon the recordkeeping requirement in section C.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

Emission Limitation:
OC emissions shall not exceed 20.02 tons/year.

Applicable Compliance Method:
Compliance may be determined based upon the recordkeeping requirement in section C.3 and 4.

Emission Limitation:
Organic compound emissions shall not exceed 8 pounds/hour and 40 pounds/day from all coatings and photochemically reactive cleanup materials, on any day when photochemically reactive materials are employed in this emissions unit.

Applicable Compliance Method:
Compliance may be determined based upon the recordkeeping requirement in section C.2.

Emission Limitation:
97.1 tons OC/VOC per rolling, 12-month period for this facility

Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in section C.5 and 6.

Emission Limitation:
9.9 tons individual HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in section C.6.

Emission Limitation:
24.9 tons combined HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in section C.6.
2. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the coatings and inks. Formulation data shall be used to determine the OC contents of the FSOCAs and cleanup materials.

F. Miscellaneous Requirements

1. PTI #13-02213 issued March 27, 1991 included a limitation for visible emissions. The permittee has demonstrated that this emissions unit is not a source of particulate emissions. Further, the emissions unit does not have a stack or equivalent opening from which visible particulate emissions could be monitored.

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Facility ID: 1318532181 Emissions Unit ID: K008 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>
non-heatset, sheetfed, offset lithographic printing press (KBA97)	OAC rule 3745-31-05(A)(3) (PTI#13-3300 issued November 12, 1997)	See A.2.a and A.2.b below.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). Organic compound (OC) emissions shall not exceed 8 pounds/hour and 40 pounds/day on any day when photochemically reactive materials are used.
	OAC rule 3745-35-07(B) Synthetic Minor to avoid Title V and MACT	Organic compound and volatile organic compound (OC/VOC) emissions from the facility shall not exceed 97.1 tons per rolling 12-month period.
		See section A.2.c.

2. Additional Terms and Conditions

- (a) OC emissions shall not exceed 91.7 pounds/hour on any day when only nonphotochemically reactive materials are used.

This emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.

OC emissions shall not exceed 76.9 tons/rolling, 12-month period.
The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, based on a rolling, 12-month summation of emissions.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.
The facility-wide emission limits shall include emissions from the following units: K002, K003, K008, K009, K010, K011, K012, P001, P002, B002, and five De Minimis gluers.

B. Operational Restrictions

1. The OC content of all the inks shall not exceed 30 percent, by weight, as a rolling, 12-month volume-weighted average.
2. The maximum annual ink usage for this emissions unit shall not exceed 324,900 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures.
3. The OC content of all the coatings shall not exceed 10 percent, by weight, as a rolling, 12-month volume-weighted average.
4. The maximum annual coating usage for this emissions unit shall not exceed 618,450 pounds, based upon a rolling, 12-month summation of the coating usage figures.
5. The maximum annual fountain solutions organic compound additive (FSOCA) usage for this emissions unit shall not exceed 50,930 pounds, based upon a rolling, 12-month summation of the FSOCA usage figures.
6. The maximum annual cleanup material usage for this emissions unit shall not exceed 36,200 pounds, based upon

a rolling, 12-month summation of the cleanup material usage figures.

7. The permittee shall operate the chiller system to refrigerate the fountain solution while the press is running production.
8. The permittee shall store all spent OC containing cleaning materials and cleaning rags in covered containers.
9. The maximum annual usage (pounds) of inks, coatings, fountain solutions and cleanup materials may be exceeded provided the annual OC emission limit is not exceeded.
10. The maximum annual OC/VOC emissions for the facility (See A.2.d) shall not exceed 97.1 tons, based upon a rolling 12-month summation of the monthly OC/VOC emissions.
11. The maximum annual HAP material usage for the facility (See A.2.d) shall be restricted and monitored so that HAP emissions shall not exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based upon a rolling 12-month summation of the emissions.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. the company identification of each ink, coating, FSOCA and cleanup material;
 - b. documentation on whether or not each ink, coating, FSOCA and cleanup material is a photochemically reactive material;
 - c. for each day during which any photochemically reactive material is employed, the amount of each ink, coating, FSOCA, and cleanup material employed, in pounds;
 - d. for each day during which any photochemically reactive material is employed, the OC content of each ink, coating, FSOCA and cleanup material employed, in percent by weight;
 - e. for each day during which a photochemically reactive material is employed, the total OC emission rate from all inks, coatings, FSOCA and photochemically reactive cleanup materials, in pounds per day (based on a 95% solvent retention factor for inks and a 0% solvent retention factor for other materials);
 - f. for each day during which a photochemically reactive material is employed, the total number of hours the emissions unit was in operation;
 - g. for each day during which a photochemically reactive material is employed, the average hourly OC emission rate for all inks, coatings, FSOCA and photochemically reactive cleanup materials, in pounds/hour, calculated as (e)/(f); and
 - h. documentation on whether or not the chiller system, used to refrigerate the fountain solution, was in service when the emissions unit was in operation.

(Note: The information in section C.2 must be for the inks, coatings, and FSOCA, as employed, including any thinning solvents added at the emissions unit.)
2. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the company identification of each ink, coating, FSOCA and cleanup material;
 - b. the total usage rate for all inks employed, in pounds;
 - c. the total usage rate for all coatings employed, in pounds;
 - d. the total usage rate for all FSOCA employed, in pounds;
 - e. the total usage rate for all cleanup materials employed, in pounds;
 - f. the OC content of each ink, coating, FSOCA and cleanup material employed, in percent by weight;
 - g. the total OC emission rate for all coatings, inks, FSOCA, and cleanup materials employed, in pounds (Based on a 95 percent organic solvent retention for inks and 100 percent organic solvent evaporation for coatings, FSOCA and cleanup materials. If the permittee sends waste off-site for waste disposal, the permittee may take a credit for that in emission calculations, provided that the permittee keeps records to calculate the total amount of OC's in the waste disposed of from this emissions unit);
 - h. the rolling, 12-month volume-weighted average OC content for all inks employed, in percent, by weight (i.e., the sum of the volume of each ink, multiplied by the OC content weight percent of each ink, and divided by the total volume of all inks for the rolling, 12-month period);
 - i. the rolling, 12-month volume-weighted average OC content for all coatings employed, in percent, by weight (i.e., the sum of the volume of each coating, multiplied by the OC content weight percent of each coating, and divided by the total volume of all coatings for the rolling, 12-month period);
 - j. the rolling, 12-month summation of ink usage, in pounds;
 - k. the rolling, 12-month summation of coating usage, in pounds;
 - l. the rolling, 12-month summation of FSOCA usage, in pounds;
 - m. the rolling, 12-month summation of cleanup material usage, in pounds; and
 - n. the rolling, 12-month summation of OC emissions for all inks, coatings, FSOCA, and cleanup materials, in pounds or tons.

3. The permittee shall collect and record the following information each month for this facility:
- a. the name and identification number of each ink, fountain solution and coating, employed;
 - b. the OC/VOC content of each ink, fountain solution and coating, in pounds per gallon;
 - c. the individual hazardous air pollutant (*HAP) content for each HAP of each ink, fountain solution and coating in pounds of individual HAP per gallon of coating, as applied;
 - d. the total combined HAP content of each coating in pounds of combined HAPs per gallon of ink, fountain solution and coating, as applied [sum all the individual HAP contents from (c)];
 - e. the amount, in gallons, of each ink, fountain solution and coating employed;
 - f. the name and identification of each cleanup material employed;
 - g. the OC/VOC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (h)];
 - j. the amount, in gallons, of each cleanup material employed;
 - k. the total OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) x (100% - solvent retention factor**)] for each ink/coating/fountain solution, plus (g) x (j) for each cleanup material], in pounds and tons per month;
 - l. the total volatile organic material usage for all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) plus (g) x (j)] for each ink, coating, fountain solution and cleanup material, in pounds and tons per month;
 - m. the updated rolling, 12-month summation of volatile organic material usage and OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed, in tons (this shall include the information for the current month and the preceding eleven calendar months);
 - n. the total individual HAP emissions for each HAP from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (c) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution, plus the sum of (h) x (j) for each cleanup material];
 - o. the total combined HAP emissions from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [the sum of (d) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution plus the sum of (i) x (j) for each cleanup material];
 - p. the updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months); and
 - q. the updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months).

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Cleveland Division of Air Quality contact. This information does not have to be kept on an individual emissions unit basis.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that include the following information for this emissions unit:
 - a. For the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds/hour, and the actual average hourly organic compound emissions for each such day.
 - b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the coatings and photochemically reactive cleanup materials exceeded 40 pounds/day, and the actual organic compound emissions for each such day.
 - c. All time periods when the chiller system, used to refrigerate the fountain solution, was not in service when the emissions unit was in operation.

The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
2. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which include the following information for this emissions unit:
 - a. each month during which there was an exceedance of the rolling, 12-month usage limitations for inks, coatings, FSOCA, and cleanup materials;
 - b. each month during which there was an exceedance of the rolling, 12-month volume-weighted OC content limitations for inks and coatings; and
 - c. each month during which there was an exceedance of the rolling, 12-month OC emission limitation.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month

during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

3. The permittee shall submit annual reports that include the total OC emissions, in tons for this emissions unit. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.
4. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which include the following information for the facility (see A.2.d):
 - a. an identification of each month during which the rolling, 12-month individual HAP emissions exceed 9.9 tons/yr based on a rolling, 12-month summation;
 - b. an identification of each month during which the rolling, 12-month combined HAP emissions exceed 24.9 tons/yr based on a rolling, 12-month summation; and
 - c. an identification of each month during which the rolling, 12-month OC/VOC emissions exceed 97.1 tons/yr based on a rolling, 12-month summation.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitations:
8 pounds/hour and 40 pounds/day of OC emissions on any day when photochemically reactive materials are used

Applicable Compliance Method:

Compliance with the emission limitations may be determined based upon the records required pursuant to section C.1. If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

Emission Limitation:

OC emissions shall not exceed 76.9 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the emission limitation shall be determined based upon the records required pursuant to section C.2.

Emission Limitation:

The OC content of all the inks shall not exceed 30 percent, by weight, as a rolling, 12-month volume-weighted average.

Applicable Compliance Method:

Compliance with the content limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The maximum annual ink usage for this emissions unit shall not exceed 324,900 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures.

Applicable Compliance Method:

Compliance with the usage limitation shall be determined based upon the records required pursuant to section C.2.

Emission Limitation:

The OC content of all the coatings shall not exceed 10 percent, by weight, as a rolling, 12-month volume-weighted average.

Applicable Compliance Method:

Compliance with the content limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The maximum annual coating usage for this emissions unit shall not exceed 618,450 pounds, based upon a rolling, 12-month summation of the monthly coating usage figures.

Applicable Compliance Method:

Compliance with the usage limitation shall be determined based upon the records required pursuant to section C.2.

Emission Limitation:

The maximum annual fountain solutions organic compound additive (FSOCA) usage for this emissions unit shall not exceed 50,930 pounds, based upon a rolling, 12-month summation of the FSOCA usage figures.

Applicable Compliance Method:

Compliance with the usage limitation shall be determined based upon the records required pursuant to section C.2.

Emission Limitation:

The maximum annual cleanup material usage for this emissions unit shall not exceed 36,200 pounds, based upon a rolling, 12-month summation of the cleanup material usage figures.

Applicable Compliance Method:

Compliance with the usage limitation shall be determined based upon the records required pursuant to section C.2.

Emission Limitation:

91.7 pounds/hour of OC emissions on any day when nonphotochemically reactive materials are used

Applicable Compliance Method:

This emission limitation was established by multiplying the emissions unit's maximum hourly coating, ink, FSOCA, and cleanup material usage rates by the worst case OC contents for the coatings, inks, FSOCA, and cleanup materials. If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

Emission Limitation:

97.1 tons OC/VOC per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.3. and 4.

Emission Limitation:

9.9 tons individual HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.4.

Emission Limitation:

24.9 tons combined HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.4.

2. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings and inks. Formulation data shall be used to determine the organic compound contents of the FSOCA and cleanup materials.

F. **Miscellaneous Requirements**

1. None

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

Facility ID: 1318532181 Emissions Unit ID: K009 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>
non-heatset, sheetfed, offset lithographic printing press (KBA972)	OAC rule 3745-31-05(A)(3) (PTI#13-3300 issued November 12, 1997)	See A.2.a and A.2.b below.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2). Organic compound (OC) emissions shall not exceed 8 pounds/hour and 40 pounds/day on any day when photochemically reactive materials are used.
	OAC rule 3745-35-07(B) Synthetic Minor to avoid Title V and MACT	Organic compound and volatile organic compound (OC/VOC) emissions from the facility shall not exceed 97.1 tons per rolling 12-month period.

See section A.2.c.

2. **Additional Terms and Conditions**

- (a) OC emissions shall not exceed 91.7 pounds/hour on any day when only nonphotochemically reactive materials are used.

This emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional

monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.

OC emissions shall not exceed 76.9 tons/rolling, 12-month period.

The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, based on a rolling, 12-month summation of emissions.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

The facility-wide emission limits shall include emissions from the following units: K002, K003, K008, K009, K010, K011, K012, P001, P002, B002, and five De Minimis gluers.

B. Operational Restrictions

1. The OC content of all the inks shall not exceed 30 percent, by weight, as a rolling, 12-month volume-weighted average.
2. The maximum annual ink usage for this emissions unit shall not exceed 324,900 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures.
3. The OC content of all the coatings shall not exceed 10 percent, by weight, as a rolling, 12-month volume-weighted average.
4. The maximum annual coating usage for this emissions unit shall not exceed 618,450 pounds, based upon a rolling, 12-month summation of the coating usage figures.
5. The maximum annual fountain solutions organic compound additive (FSOCA) usage for this emissions unit shall not exceed 50,930 pounds, based upon a rolling, 12-month summation of the FSOCA usage figures.
6. The maximum annual cleanup material usage for this emissions unit shall not exceed 36,200 pounds, based upon a rolling, 12-month summation of the cleanup material usage figures.
7. The permittee shall operate the chiller system to refrigerate the fountain solution while the press is running production.
8. The permittee shall store all spent OC containing cleaning materials and cleaning rags in covered containers.
9. The maximum annual usage (pounds) of inks, coatings, fountain solutions and cleanup materials may be exceeded provided the annual OC emission limit is not exceeded.
10. The maximum annual OC/VOC emissions for the facility (See A.2.d) shall not exceed 97.1 tons, based upon a rolling 12-month summation of the monthly OC/VOC emissions.
11. The maximum annual HAP material usage for the facility (See A.2.d) shall be restricted and monitored so that HAP emissions shall not exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based upon a rolling 12-month summation of the emissions.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. the company identification of each ink, coating, FSOCA and cleanup material;
 - b. documentation on whether or not each ink, coating, FSOCA and cleanup material is a photochemically reactive material;
 - c. for each day during which any photochemically reactive material is employed, the amount of each ink, coating, FSOCA, and cleanup material employed, in pounds;
 - d. for each day during which any photochemically reactive material is employed, the OC content of each ink, coating, FSOCA and cleanup material employed, in percent by weight;
 - e. for each day during which a photochemically reactive material is employed, the total OC emission rate from all inks, coatings, FSOCA and photochemically reactive cleanup materials, in pounds per day (based on a 95% solvent retention factor for inks and a 0% solvent retention factor for other materials);
 - f. for each day during which a photochemically reactive material is employed, the total number of hours the emissions unit was in operation;
 - g. for each day during which a photochemically reactive material is employed, the average hourly OC emission rate for all inks, coatings, FSOCA and photochemically reactive cleanup materials, in pounds/hour, calculated as (e)/(f); and
 - h. documentation on whether or not the chiller system, used to refrigerate the fountain solution, was in service when the emissions unit was in operation.

(Note: The information in section C.2 must be for the inks, coatings, and FSOCA, as employed, including any thinning solvents added at the emissions unit.)
2. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the company identification of each ink, coating, FSOCA and cleanup material;
 - b. the total usage rate for all inks employed, in pounds;
 - c. the total usage rate for all coatings employed, in pounds;
 - d. the total usage rate for all FSOCA employed, in pounds;

- e. the total usage rate for all cleanup materials employed, in pounds;
 - f. the OC content of each ink, coating, FSOCA and cleanup material employed, in percent by weight;
 - g. the total OC emission rate for all coatings, inks, FSOCA, and cleanup materials employed, in pounds (Based on a 95 percent organic solvent retention for inks and 100 percent organic solvent evaporation for coatings, FSOCA and cleanup materials. If the permittee sends waste off-site for waste disposal, the permittee may take a credit for that in emission calculations, provided that the permittee keeps records to calculate the total amount of OC's in the waste disposed of from this emissions unit);
 - h. the rolling, 12-month volume-weighted average OC content for all inks employed, in percent, by weight (i.e., the sum of the volume of each ink, multiplied by the OC content weight percent of each ink, and divided by the total volume of all inks for the rolling, 12-month period);
 - i. the rolling, 12-month volume-weighted average OC content for all coatings employed, in percent, by weight (i.e., the sum of the volume of each coating, multiplied by the OC content weight percent of each coating, and divided by the total volume of all coatings for the rolling, 12-month period);
 - j. the rolling, 12-month summation of ink usage, in pounds;
 - k. the rolling, 12-month summation of coating usage, in pounds;
 - l. the rolling, 12-month summation of FSOCA usage, in pounds;
 - m. the rolling, 12-month summation of cleanup material usage, in pounds; and
 - n. the rolling, 12-month summation of OC emissions for all inks, coatings, FSOCA, and cleanup materials, in pounds or tons.
3. The permittee shall collect and record the following information each month for this facility:
- a. the name and identification number of each ink, fountain solution and coating, employed;
 - b. the OC/VOC content of each ink, fountain solution and coating, in pounds per gallon;
 - c. the individual hazardous air pollutant (*HAP) content for each HAP of each ink, fountain solution and coating in pounds of individual HAP per gallon of coating, as applied;
 - d. the total combined HAP content of each coating in pounds of combined HAPs per gallon of ink, fountain solution and coating, as applied [sum all the individual HAP contents from (c)];
 - e. the amount, in gallons, of each ink, fountain solution and coating employed;
 - f. the name and identification of each cleanup material employed;
 - g. the OC/VOC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (h)];
 - j. the amount, in gallons, of each cleanup material employed;
 - k. the total OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) x (100% - solvent retention factor**)] for each ink/coating/fountain solution, plus (g) x (j) for each cleanup material], in pounds and tons per month;
 - l. the total volatile organic material usage for all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) plus (g) x (j)] for each ink, coating, fountain solution and cleanup material, in pounds and tons per month;
 - m. the updated rolling, 12-month summation of volatile organic material usage and OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed, in tons (this shall include the information for the current month and the preceding eleven calendar months);
 - n. the total individual HAP emissions for each HAP from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (c) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution, plus the sum of (h) x (j) for each cleanup material];
 - o. the total combined HAP emissions from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [the sum of (d) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution plus the sum of (i) x (j) for each cleanup material];
 - p. the updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months); and
 - q. the updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months).

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Cleveland Division of Air Quality contact. This information does not have to be kept on an individual emissions unit basis.

D. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that include the following information for this emissions unit:

a. For the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the coatings and photochemically reactive cleanup materials exceeded 8 pounds/hour, and the actual average hourly organic compound emissions for each such day.

b. For the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the coatings and photochemically reactive cleanup materials exceeded 40 pounds/day, and the actual organic compound emissions for each such day.

c. All time periods when the chiller system, used to refrigerate the fountain solution, was not in service when the emissions unit was in operation.

The deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

2. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which include the following information for this emissions unit:

a. each month during which there was an exceedance of the rolling, 12-month usage limitations for inks, coatings, FSOCA, and cleanup materials;

b. each month during which there was an exceedance of the rolling, 12-month volume-weighted OC content limitations for inks and coatings; and

c. each month during which there was an exceedance of the rolling, 12-month OC emission limitation.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

3. The permittee shall submit annual reports that include the total OC emissions, in tons for this emissions unit. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.

4. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which include the following information for the facility (see A.2.d) :

a. an identification of each month during which the rolling, 12-month individual HAP emissions exceed 9.9 tons/yr based on a rolling, 12-month summation;

b. an identification of each month during which the rolling, 12-month combined HAP emissions exceed 24.9 tons/yr based on a rolling, 12-month summation; and

c. an identification of each month during which the rolling, 12-month OC/VOC emissions exceed 97.1 tons/yr based on a rolling, 12-month summation.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitations:

8 pounds/hour and 40 pounds/day of OC emissions on any day when photochemically reactive materials are used

Applicable Compliance Method:

Compliance with the emission limitations may be determined based upon the records required pursuant to section C.1. If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

Emission Limitation:

OC emissions shall not exceed 76.9 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the emission limitation shall be determined based upon the records required pursuant to section C.2.

Emission Limitation:

The OC content of all the inks shall not exceed 30 percent, by weight, as a rolling, 12-month volume-weighted average.

Applicable Compliance Method:

Compliance with the content limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The maximum annual ink usage for this emissions unit shall not exceed 324,900 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures.

Applicable Compliance Method:

Compliance with the usage limitation shall be determined based upon the records required pursuant to section C.2.

Emission Limitation:

The OC content of all the coatings shall not exceed 10 percent, by weight, as a rolling, 12-month volume-

weighted average.

Applicable Compliance Method:

Compliance with the content limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The maximum annual coating usage for this emissions unit shall not exceed 618,450 pounds, based upon a rolling, 12-month summation of the monthly coating usage figures.

Applicable Compliance Method:

Compliance with the usage limitation shall be determined based upon the records required pursuant to section C.2.

Emission Limitation:

The maximum annual fountain solutions organic compound additive (FSOCA) usage for this emissions unit shall not exceed 50,930 pounds, based upon a rolling, 12-month summation of the FSOCA usage figures.

Applicable Compliance Method:

Compliance with the usage limitation shall be determined based upon the records required pursuant to section C.2.

Emission Limitation:

The maximum annual cleanup material usage for this emissions unit shall not exceed 36,200 pounds, based upon a rolling, 12-month summation of the cleanup material usage figures.

Applicable Compliance Method:

Compliance with the usage limitation shall be determined based upon the records required pursuant to section C.2.

Emission Limitation:

91.7 pounds/hour of OC emissions on any day when nonphotochemically reactive materials are used

Applicable Compliance Method:

This emission limitation was established by multiplying the emissions unit's maximum hourly coating, ink, FSOCA, and cleanup material usage rates by the worst case OC contents for the coatings, inks, FSOCA, and cleanup materials. If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

Emission Limitation:

97.1 tons OC/VOC per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.3. and 4.

Emission Limitation:

9.9 tons individual HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.4.

Emission Limitation:

24.9 tons combined HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.4.

2. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings and inks. Formulation data shall be used to determine the organic compound contents of the FSOCA and cleanup materials.

F. Miscellaneous Requirements

1. None

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

Facility ID: 1318532181 Emissions Unit ID: K010 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

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
flexographic printing unit (Flexo 1) equipped with natural gas-fired dryer	OAC rule 3745-21-09(Y)	The VOC content of the coatings and inks employed in this emissions unit shall not exceed 40 percent VOC, by volume, of the coating and ink, excluding water or 25 percent, by volume, of the volatile matter in the coating and ink.
	OAC rule 3745-31-05(A)(3) (PTI #13-3333 issued November 19, 1997)	See A.2.a and A.2.b below.
	OAC rule 3745-35-07(B) Synthetic Minor to avoid Title V and MACT	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(Y). Organic compound and volatile organic compound (OC/VOC) emissions from the facility shall not exceed 97.1 tons per rolling 12-month period.
		See section A.2.c.

2. Additional Terms and Conditions

- VOC emissions shall not exceed 87.1 pounds/hour.

This emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.

VOC emissions shall not exceed 36.6 tons/rolling, 12-month period.

The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, based on a rolling, 12-month summation of emissions.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

The facility-wide emission limits shall include emissions from the following units: K002, K003, K008, K009, K010, K011, K012, P001, P002, B002, and five De Minimis gluers.

B. Operational Restrictions

- The VOC content of all the inks shall not exceed 6 percent, by weight, as a rolling, 12-month volume-weighted average.
- The maximum annual ink usage for this emissions unit shall not exceed 319,138 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures. The maximum usage (pounds) of ink may be exceeded provided the annual VOC emission limitation is not exceeded.
- The VOC content of all the coatings shall not exceed 13 percent, by weight, as a rolling, 12-month volume-weighted average.
- The maximum annual coating usage for this emissions unit shall not exceed 373,328 pounds, based upon a rolling, 12-month summation of the monthly coating usage figures. The maximum usage (pounds) of coating may be exceeded provided the annual VOC emission limitation is not exceeded.
- The maximum annual solvent-based cleanup material usage for this emissions unit shall not exceed 6,859 pounds, based upon a rolling, 12-month summation of the monthly cleanup material usage figures. The maximum usage (pounds) of solvent-based cleanup materials may be exceeded provided the annual VOC emission limitation is not exceeded.
- The permittee shall store all spent VOC containing cleaning materials and cleaning rags in covered containers.
- The maximum annual OC/VOC emissions for the facility (See A.2.d) shall not exceed 97.1 tons, based upon a rolling 12-month summation of the monthly OC/VOC emissions.
- The maximum annual HAP material usage for the facility (See A.2.d) shall be restricted and monitored so that HAP emissions shall not exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based upon a rolling 12-month summation of the emissions.

C. Monitoring and/or Record Keeping Requirements

- The permittee shall collect and record the following information for each month for this emissions unit:
 - the company identification of each ink, coating, and cleanup material employed;
 - the amount of each ink, coating, and cleanup material employed, in pounds;
 - the VOC content of each ink, coating, and cleanup material employed, in percent by weight;
 - the total VOC emissions for all inks, coatings, and cleanup materials, in pounds or tons (Based on a 7 percent organic solvent retention for inks and 100 percent solvent evaporation for coatings and cleanup materials. If the permittee sends waste off-site for waste disposal, the permittee may take credit for that in the emission calculations, provided that the permittee keeps records to calculate the total amount of VOC in the waste disposed of from this emissions unit);
 - the rolling, 12-month summation of ink usage, in pounds;
 - the rolling, 12-month summation of coating usage, in pounds;

- g. the rolling, 12-month summation of solvent-based cleanup material usage, in pounds;
- h. the rolling, 12-month volume-weighted average VOC content for all inks, in percent, by weight (i.e., the sum of the volume of each ink, multiplied by the OC content weight percent of each ink, and divided by the total volume of all inks for the rolling, 12-month period);
- i. the rolling, 12-month volume-weighted average VOC content for all coatings, in percent, by weight (i.e., the sum of the volume of each coating, multiplied by the OC content weight percent of each coating, and divided by the total volume of all coatings for the rolling, 12-month period);
- j. the rolling, 12-month summation of VOC emissions for all inks, coatings, and cleanup materials, in pounds or tons.

2. The permittee shall collect and record the following information each month for this facility:

- a. the name and identification number of each ink, fountain solution and coating, employed;
- b. the OC/VOC content of each ink, fountain solution and coating, in pounds per gallon;
- c. the individual hazardous air pollutant (*HAP) content for each HAP of each ink, fountain solution and coating in pounds of individual HAP per gallon of coating, as applied;
- d. the total combined HAP content of each coating in pounds of combined HAPs per gallon of ink, fountain solution and coating, as applied [sum all the individual HAP contents from (c)];
- e. the amount, in gallons, of each ink, fountain solution and coating employed;
- f. the name and identification of each cleanup material employed;
- g. the OC/VOC content of each cleanup material, in pounds per gallon;
- h. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
- i. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (h)];
- j. the amount, in gallons, of each cleanup material employed;
- k. the total OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) x (100% - solvent retention factor**)] for each ink/coating/fountain solution, plus (g) x (j) for each cleanup material], in pounds and tons per month;
- l. the total volatile organic material usage for all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) plus (g) x (j)] for each ink, coating, fountain solution and cleanup material, in pounds and tons per month;
- m. the updated rolling, 12-month summation of volatile organic material usage and OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed, in tons (this shall include the information for the current month and the preceding eleven calendar months);
- n. the total individual HAP emissions for each HAP from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (c) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution, plus the sum of (h) x (j) for each cleanup material];
- o. the total combined HAP emissions from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [the sum of (d) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution plus the sum of (i) x (j) for each cleanup material];
- p. the updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months); and
- q. the updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months).

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Cleveland Division of Air Quality contact. This information does not have to be kept on an individual emissions unit basis.

D. Reporting Requirements

- 1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) 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 Cleveland DAQ within 30 days following the end of the calendar month.
- 2. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the following for this emissions unit:
 - a. the rolling, 12-month usage limitations for inks, coatings, and solvent-based cleanup materials, in pounds;
 - b. the rolling, 12-month volume-weighted average VOC content limitations for all inks and coatings; and
 - c. the rolling, 12-month VOC emission limitation for all inks, coatings, and cleanup materials.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be

taken, to correct the situation.

3. The permittee shall submit annual reports that include the total VOC emissions, in tons for this emissions unit. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.
4. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which include the following information for the facility (see A.2.d):
 - a. an identification of each month during which the rolling, 12-month individual HAP emissions exceed 9.9 tons/yr based on a rolling, 12-month summation;
 - b. an identification of each month during which the rolling, 12-month combined HAP emissions exceed 24.9 tons/yr based on a rolling, 12-month summation; and
 - c. an identification of each month during which the rolling, 12-month OC/VOC emissions exceed 97.1 tons/yr based on a rolling, 12-month summation.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
Emission Limitation:
The VOC content of the inks and coatings shall not exceed 40 percent VOC by volume, excluding water or 25 percent by volume, of the volatile matter.

Applicable Compliance Method:

Compliance with the applicable emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

VOC emissions shall not exceed 87.1 pounds/hour.

Applicable Compliance Method:

This emission limitation was established by multiplying the emissions unit's maximum hourly coating, ink, and cleanup material usage rates by the worst case OC contents for the coatings, inks, and cleanup materials. The hourly potential to emit for this emissions unit shall be verified based upon the records required pursuant to section C.1 and use of the following equation:

$$HE = \text{Sum} [\text{muse } i, * \text{VOC } \% i * (100\text{-RF})] / \text{MH}$$

Where:

HE = hourly emissions, in pounds per hour;

i = subscript denoting individual coating;

muse = monthly usage of each individual coating or ink, in pounds/month

VOC% =VOC content for each individual material, in weight percent;

RF = retention factor, 7% for ink and 0% for coating;

MH =total hours the press was in operation during the month

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

Emission Limitation:

VOC emissions shall not exceed 36.6 tons/rolling, 12-month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The VOC content of all the inks shall not exceed 6 percent, by weight, as a rolling, 12-month volume-weighted average.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The maximum annual ink usage for this emissions unit shall not exceed 319,138 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures. The maximum usage (pounds) of ink may be exceeded provided the annual VOC emission limitation is not exceeded.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The VOC content of all the coatings shall not exceed 13 percent, by weight, as a rolling, 12-month volume-weighted average.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The maximum annual coating usage for this emissions unit shall not exceed 373,328 pounds, based upon a rolling, 12-month summation of the coating usage figures. The maximum usage (pounds) of coating may be exceeded provided the annual VOC emission limitation is not exceeded.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The maximum annual solvent-based cleanup material usage for this emissions unit shall not exceed 6,859 pounds, based upon a rolling, 12-month summation of the cleanup material usage figures. The maximum usage (pounds) of solvent-based cleanup materials may be exceeded provided the annual VOC emission limitation is not exceeded.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

97.1 tons OC/VOC per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.2 and 3.

Emission Limitation:

9.9 tons individual HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.3.

Emission Limitation:

24.9 tons combined HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.3.

2. Formulation data or USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

F. **Miscellaneous Requirements**

1. None

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

Facility ID: 1318532181 Emissions Unit ID: K011 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (a) None.

A. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
flexographic printing unit (Flexo 2) equipped with natural gas-fired dryer	OAC rule 3745-21-09(Y)	The VOC content of the coatings and inks employed in this emissions unit shall not exceed 40 percent VOC, by volume, of the coating and ink, excluding water or 25 percent, by volume, of the volatile matter in the coating and ink.
	OAC rule 3745-31-05(A)(3) (PTI #13-3414 issued June 24, 1998)	See A.2.a and A.2.b below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(Y).
	OAC rule 3745-35-07(B) Synthetic Minor to avoid Title V and MACT	Organic compound and volatile organic compound (OC/VOC) emissions from the facility shall not exceed 97.1 tons per rolling 12-month period.

See section A.2.c.

2. Additional Terms and Conditions

- (a) VOC emissions shall not exceed 87.1 pounds/hour.

This emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.

VOC emissions shall not exceed 36.6 tons/rolling, 12-month period.

The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, based on a rolling, 12-month summation of emissions.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

The facility-wide emission limits shall include emissions from the following units: K002, K003, K008, K009, K010, K011, K012, P001, P002, B002, and five De Minimis gluers.

B. Operational Restrictions

1. The VOC content of all the inks shall not exceed 6 percent, by weight, as a rolling, 12-month volume-weighted average.
2. The maximum annual ink usage for this emissions unit shall not exceed 319,138 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures. The maximum usage (pounds) of ink may be exceeded provided the annual VOC emission limitation is not exceeded.
3. The VOC content of all the coatings shall not exceed 13 percent, by weight, as a rolling, 12-month volume-weighted average.
4. The maximum annual coating usage for this emissions unit shall not exceed 373,328 pounds, based upon a rolling, 12-month summation of the monthly coating usage figures. The maximum usage (pounds) of coating may be exceeded provided the annual VOC emission limitation is not exceeded.
5. The maximum annual solvent-based cleanup material usage for this emissions unit shall not exceed 6,859 pounds, based upon a rolling, 12-month summation of the monthly cleanup material usage figures. The maximum usage (pounds) of solvent-based cleanup materials may be exceeded provided the annual VOC emission limitation is not exceeded.
6. The permittee shall store all spent VOC containing cleaning materials and cleaning rags in covered containers.
7. The maximum annual OC/VOC emissions for the facility (See A.2.d) shall not exceed 97.1 tons, based upon a rolling 12-month summation of the monthly OC/VOC emissions.
8. The maximum annual HAP material usage for the facility (See A.2.d) shall be restricted and monitored so that HAP emissions shall not exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based upon a rolling 12-month summation of the emissions.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the company identification of each ink, coating, and cleanup material employed;
 - b. the amount of each ink, coating, and cleanup material employed, in pounds;
 - c. the VOC content of each ink, coating, and cleanup material employed, in percent by weight;
 - d. the total VOC emissions for all inks, coatings, and cleanup materials, in pounds or tons (Based on a 7 percent organic solvent retention for inks and 100 percent solvent evaporation for coatings and cleanup materials. If the permittee sends waste off-site for waste disposal, the permittee may take credit for that in the emission calculations, provided that the permittee keeps records to calculate the total amount of VOC in the waste disposed of from this emissions unit);
 - e. the rolling, 12-month summation of ink usage, in pounds;
 - f. the rolling, 12-month summation of coating usage, in pounds;
 - g. the rolling, 12-month summation of solvent-based cleanup material usage, in pounds;
 - h. the rolling, 12-month volume-weighted average VOC content for all inks, in percent, by weight (i.e., the sum of the volume of each ink, multiplied by the OC content weight percent of each ink, and divided by the total volume of all inks for the rolling, 12-month period);
 - i. the rolling, 12-month volume-weighted average VOC content for all coatings, in percent, by weight (i.e., the sum of the volume of each coating, multiplied by the OC content weight percent of each coating, and divided by the total volume of all coatings for the rolling, 12-month period); and
 - j. the rolling, 12-month summation of VOC emissions for all inks, coatings, and cleanup materials, in pounds or tons.
2. The permittee shall collect and record the following information each month for this facility:
 - a. the name and identification number of each ink, fountain solution and coating, employed;
 - b. the OC/VOC content of each ink, fountain solution and coating, in pounds per gallon;

- c. the individual hazardous air pollutant (*HAP) content for each HAP of each ink, fountain solution and coating in pounds of individual HAP per gallon of coating, as applied;
 - d. the total combined HAP content of each coating in pounds of combined HAPs per gallon of ink, fountain solution and coating, as applied [sum all the individual HAP contents from (c)];
 - e. the amount, in gallons, of each ink, fountain solution and coating employed;
 - f. the name and identification of each cleanup material employed;
 - g. the OC/VOC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (h)];
 - j. the amount, in gallons, of each cleanup material employed;
 - k. the total OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) x (100% - solvent retention factor**)] for each ink/coating/fountain solution, plus (g) x (j) for each cleanup material], in pounds and tons per month;
 - l. the total volatile organic material usage for all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) plus (g) x (j)] for each ink, coating, fountain solution and cleanup material, in pounds and tons per month;
 - m. the updated rolling, 12-month summation of volatile organic material usage and OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed, in tons (this shall include the information for the current month and the preceding eleven calendar months);
 - n. the total individual HAP emissions for each HAP from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (c) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution, plus the sum of (h) x (j) for each cleanup material];
 - o. the total combined HAP emissions from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [the sum of (d) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution plus the sum of (i) x (j) for each cleanup material];
 - p. the updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months); and
 - q. the updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months).

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Cleveland Division of Air Quality contact. This information does not have to be kept on an individual emissions unit basis.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) 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 Cleveland DAQ within 30 days following the end of the calendar month.
2. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the following for this emissions unit:
 - a. the rolling, 12-month usage limitations for inks, coatings, and solvent-based cleanup materials, in pounds;
 - b. the rolling, 12-month volume-weighted average VOC content limitations for all inks and coatings; and
 - c. the rolling, 12-month VOC emission limitation for all inks, coatings, and cleanup materials.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.
3. The permittee shall submit annual reports that include the total VOC emissions, in tons for this emissions unit. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.
4. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which include the following information for the facility (see A.2.d) :
 - a. an identification of each month during which the rolling, 12-month individual HAP emissions exceed 9.9 tons/yr based on a rolling, 12-month summation;
 - b. an identification of each month during which the rolling, 12-month combined HAP emissions exceed 24.9 tons/yr based on a rolling, 12-month summation; and
 - c. an identification of each month during which the rolling, 12-month OC/VOC emissions exceed 97.1 tons/yr based on a rolling, 12-month summation.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be

taken, to correct the situation.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
Emission Limitation:
The VOC content of the inks and coatings shall not exceed 40 percent VOC by volume, excluding water or 25 percent by volume, of the volatile matter.

Applicable Compliance Method:

Compliance with the applicable emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

VOC emissions shall not exceed 87.1 pounds/hour.

Applicable Compliance Method:

This emission limitation was established by multiplying the emissions unit's maximum hourly coating, ink, and cleanup material usage rates by the worst case OC contents for the coatings, inks, and cleanup materials. The hourly potential to emit for this emissions unit shall be verified based upon the records required pursuant to section C.1 and use of the following equation:

$$HE = \text{Sum} [\text{muse } i, * \text{VOC } \% i * (100\text{-RF})] / \text{MH}$$

Where:

HE = hourly emissions, in pounds per hour;

i = subscript denoting individual coating;

muse = monthly usage of each individual coating or ink, in pounds/month

VOC% = VOC content for each individual material, in weight percent;

RF = retention factor, 7% for ink and 0% for coating;

MH = total hours the press was in operation during the month

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

Emission Limitation:

VOC emissions shall not exceed 36.6 tons/rolling, 12-month period.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The VOC content of all the inks shall not exceed 6 percent, by weight, as a rolling, 12-month volume-weighted average.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The maximum annual ink usage for this emissions unit shall not exceed 319,138 pounds, based upon a rolling, 12-month summation of the monthly ink usage figures. The maximum usage (pounds) of ink may be exceeded provided the annual VOC emission limitation is not exceeded.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The VOC content of all the coatings shall not exceed 13 percent, by weight, as a rolling, 12-month volume-weighted average.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The maximum annual coating usage for this emissions unit shall not exceed 373,328 pounds, based upon a rolling, 12-month summation of the coating usage figures. The maximum usage (pounds) of coating may be exceeded provided the annual VOC emission limitation is not exceeded.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

The maximum annual solvent-based cleanup material usage for this emissions unit shall not exceed 6,859 pounds, based upon a rolling, 12-month summation of the cleanup material usage figures. The maximum usage (pounds) of solvent-based cleanup materials may be exceeded provided the annual VOC emission limitation is not exceeded.

Applicable Compliance Method:

Compliance with this emission limitation shall be determined based upon the records required pursuant to section C.1.

Emission Limitation:

97.1 tons OC/VOC per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.2 and 3.

Emission Limitation:

9.9 tons individual HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:
 Compliance shall be determined based on the recordkeeping specified in section C.3.
 Emission Limitation:
 24.9 tons combined HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:
 Compliance shall be determined based on the recordkeeping specified in section C.3.

2. Formulation data or USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

F. Miscellaneous Requirements

1. None

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

Facility ID: 1318532181 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>
Asitrade corrugating machine with capability to glue pre-printed sheet or pre-printed web (Machine 1)	OAC rule 3745-21-09(F)	The VOC content, as applied, of each coating (adhesive) employed shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents.
	OAC rule 3745-31-05(A)(3) (PTI #13-3564 issued April 20, 2000)	8.58 pounds/hour of VOC emissions (See A.1.2.a below.)
		15.0 tons of VOC emissions per rolling, 12-month period
	OAC rule 3745-35-07(B) Synthetic Minor to avoid Title V and MACT	Organic compound and volatile organic compound (OC/VOC) emissions from the facility shall not exceed 97.1 tons per rolling 12-month period.
		See section A.2.b.

2. Additional Terms and Conditions

- (a) This emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.
 The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, based on a rolling, 12-month summation of emissions.

 The permittee has existing records to demonstrate compliance with this limit upon permit issuance. The facility-wide emission limits shall include emissions from the following units: K002, K003, K008, K009, K010, K011, K012, P001, P002, B002, and five De Minimis gluers.

B. Operational Restrictions

1. The maximum annual OC/VOC emissions for the facility (See A.2.c) shall not exceed 97.1 tons, based upon a rolling 12-month summation of the monthly OC/VOC emissions.

2. The maximum annual HAP material usage for the facility (See A.2.c) shall be restricted and monitored so that HAP emissions shall not exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based upon a rolling 12-month summation of the emissions.
- C. **Monitoring and/or Record Keeping Requirements**
1. The permittee shall collect and record the following information each month:
 - a. the company name and identification number of each adhesive, as applied;
 - b. the amount of each adhesive employed, in gallons;
 - c. the VOC content of each adhesive (excluding water and exempt solvents), in pounds/gallon, as applied;
 - d. the total VOC emissions for all adhesives, in pounds or tons (based on a 100 percent VOC evaporation rate); and
 - e. the rolling, 12-month summation of the VOC emissions, in tons.
 2. The permit to install for this emissions unit P001 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):
 - a. Pollutant: Vinyl Acetate
TLV (ug/m3): 35000
Maximum Hourly Emission Rate (lbs/hr): 0.41
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.88
MAGLC (ug/m3): 833
 - b. Pollutant: Methyl Alcohol
TLV (ug/m3): 262000
Maximum Hourly Emission Rate (lbs/hr): 0.24
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 18.32
MAGLC (ug/m3): 6238
 - c. Pollutant: Formaldehyde
TLV (ug/m3): 370
Maximum Hourly Emission Rate (lbs/hr): 0.10
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7.98
MAGLC (ug/m3): 9
 - d. Pollutant: Toluene
TLV (ug/m3): 188000
Maximum Hourly Emission Rate (lbs/hr): 0.03
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.54
MAGLC (ug/m3): 4476
 - e. Pollutant: Acetaldehyde
TLV (ug/m3): 45000
Maximum Hourly Emission Rate (lbs/hr): 0.02
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.83
MAGLC (ug/m3): 1071
 - f. Pollutant: Ethylene Glycol
TLV (ug/m3): 100000
Maximum Hourly Emission Rate (lbs/hr): 0.01
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.58
MAGLC (ug/m3): 2381
 - g. Pollutant: Hydroquinone
TLV (ug/m3): 2000
Maximum Hourly Emission Rate (lbs/hr): 0.001
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.09
MAGLC (ug/m3): 48
 3. 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 Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
 4. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, 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 changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
6. The permittee shall collect and record the following information each month for this facility:
 - a. the name and identification number of each ink, fountain solution and coating, employed;
 - b. the OC/VOC content of each ink, fountain solution and coating, in pounds per gallon;
 - c. the individual hazardous air pollutant (*HAP) content for each HAP of each ink, fountain solution and coating in pounds of individual HAP per gallon of coating, as applied;
 - d. the total combined HAP content of each coating in pounds of combined HAPs per gallon of ink, fountain solution and coating, as applied [sum all the individual HAP contents from (c)];
 - e. the amount, in gallons, of each ink, fountain solution and coating employed;
 - f. the name and identification of each cleanup material employed;
 - g. the OC/VOC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (h)];
 - j. the amount, in gallons, of each cleanup material employed;
 - k. the total OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) x (100% - solvent retention factor**)] for each ink/coating/fountain solution, plus (g) x (j) for each cleanup material], in pounds and tons per month;
 - l. the total volatile organic material usage for all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) plus (g) x (j)] for each ink, coating, fountain solution and cleanup material, in pounds and tons per month;
 - m. the updated rolling, 12-month summation of volatile organic material usage and OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed, in tons (this shall include the information for the current month and the preceding eleven calendar months);
 - n. the total individual HAP emissions for each HAP from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (c) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution, plus the sum of (h) x (j) for each cleanup material];
 - o. the total combined HAP emissions from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [the sum of (d) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution plus the sum of (i) x (j) for each cleanup material];
 - p. the updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months); and
 - q. the updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months).

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Cleveland Division of Air Quality contact. This information does not have to be kept on an individual emissions unit basis.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) 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 Cleveland DAQ within 30 days following the end of the calendar month. The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.
2. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the rolling, 12-month VOC emission limitation for this emissions unit. The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.
3. The permittee shall submit annual reports that include the total VOC emissions, in tons for this emissions unit. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.

4. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which include the following information for the facility (see A.2.c):
- an identification of each month during which the rolling, 12-month individual HAP emissions exceed 9.9 tons/yr based on a rolling, 12-month summation;
 - an identification of each month during which the rolling, 12-month combined HAP emissions exceed 24.9 tons/yr based on a rolling, 12-month summation; and
 - an identification of each month during which the rolling, 12-month OC/VOC emissions exceed 97.1 tons/yr based on a rolling, 12-month summation.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following method(s):
- Emission Limitation:
2.9 lbs of VOC/gallon coating, excluding water and exempt solvents
- Applicable Compliance Method:
Compliance shall be determined based upon the records required pursuant to section C.1.
Emission Limitation:
8.58 pounds/hour of VOC emissions
- Applicable Compliance Method:
This emission limitation was established by multiplying the emissions unit's maximum hourly adhesive application rate by the worst case adhesive VOC content. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.
Emission Limitation:
15.0 tons of VOC emissions/rolling, 12-month period
- Applicable Compliance Method:
Compliance shall be determined based upon the records required pursuant to section C.1.
Emission Limitation:
97.1 tons OC/VOC per rolling, 12-month period for this facility
- Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in section C.6 and 7.
Emission Limitation:
9.9 tons individual HAP emissions per rolling, 12-month period for this facility
- Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in section C.7.
Emission Limitation:
24.9 tons combined HAP emissions per rolling, 12-month period for this facility
- Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in section C.7.
2. Formulation data or USEPA Method 24 shall be used to determine the VOC contents for the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. Miscellaneous Requirements

1. None

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

Facility ID: 1318532181 Emissions Unit ID: P002 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.
- 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.
- 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>
Asitrade corrugating machine with capability to glue pre-printed sheet (Machine 2)	OAC rule 3745-21-09(F)	The VOC content, as applied, of each coating (adhesive) employed shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents.
	OAC rule 3745-31-05(A)(3) (PTI #13-3564 issued March 28, 2001)	8.58 pounds/hour of VOC emissions (See A.2.a below.)
	OAC rule 3745-35-07(B) Synthetic Minor to avoid Title V and MACT	15.0 tons of VOC emissions per rolling, 12-month period Organic compounds and volatile organic compound (OC/VOC) emissions from the facility shall not exceed 97.1 tons per rolling 12-month period.
		See section A.2.b.

2. Additional Terms and Conditions

- (a) This emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.
The total allowable emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, based on a rolling, 12-month summation of emissions.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance. The facility-wide emission limits shall include emissions from the following units: K002, K003, K008, K009, K010, K011, K012, P001, P002, B002, and five De Minimis gluers.

B. Operational Restrictions

1. The maximum annual OC/VOC emissions for the facility (See A.2.c) shall not exceed 97.1 tons, based upon a rolling 12-month summation of the monthly OC/VOC emissions.
2. The maximum annual HAP material usage for the facility (See A.2.c) shall be restricted and monitored so that HAP emissions shall not exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based upon a rolling 12-month summation of the emissions.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month:
 - a. the company name and identification number of each adhesive, as applied;
 - b. the amount of each adhesive employed, in gallons;
 - c. the VOC content of each adhesive (excluding water and exempt solvents), in pounds/gallon, as applied;
 - d. the total VOC emissions for all adhesives, in pounds or tons (based on a 100 percent VOC evaporation rate); and
 - e. the rolling, 12-month summation of the VOC emissions, in tons.
2. The permit to install for this emissions unit P001 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):
 - a. Pollutant: Vinyl Acetate
TLV (ug/m3): 35000
Maximum Hourly Emission Rate (lbs/hr):0.41
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 31.88
MAGLC (ug/m3): 833
 - b. Pollutant: Methyl Alcohol
TLV (ug/m3): 262000
Maximum Hourly Emission Rate (lbs/hr): 0.24
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 18.32
MAGLC (ug/m3): 6238
 - c. Pollutant: Formaldehyde
TLV (ug/m3): 370
Maximum Hourly Emission Rate (lbs/hr): 0.10
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7.98
MAGLC (ug/m3): 9

- d. Pollutant: Toluene
 TLV (ug/m3): 188000
 Maximum Hourly Emission Rate (lbs/hr): 0.03
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.54
 MAGLC (ug/m3): 4476
- e. Pollutant: Acetaldehyde
 TLV (ug/m3): 45000
 Maximum Hourly Emission Rate (lbs/hr): 0.02
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.83
 MAGLC (ug/m3): 1071
- f. Pollutant: Ethylene Glycol
 TLV (ug/m3): 100000
 Maximum Hourly Emission Rate (lbs/hr): 0.01
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.58
 MAGLC (ug/m3): 2381
- g. Pollutant: Hydroquinone
 TLV (ug/m3): 2000
 Maximum Hourly Emission Rate (lbs/hr): 0.001
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.09
 MAGLC (ug/m3): 48
3. 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 Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
 - 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
 - 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.).
4. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, 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 changed emissions unit will still satisfy the "Air Toxic Policy":
- a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
6. The permittee shall collect and record the following information each month for this facility:
- the name and identification number of each ink, fountain solution and coating, employed;
 - the OC/VOC content of each ink, fountain solution and coating, in pounds per gallon;
 - the individual hazardous air pollutant (*HAP) content for each HAP of each ink, fountain solution and coating in pounds of individual HAP per gallon of coating, as applied;
 - the total combined HAP content of each coating in pounds of combined HAPs per gallon of ink, fountain solution and coating, as applied [sum all the individual HAP contents from (c)];
 - the amount, in gallons, of each ink, fountain solution and coating employed;
 - the name and identification of each cleanup material employed;
 - the OC/VOC content of each cleanup material, in pounds per gallon;
 - the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (h)];
 - the amount, in gallons, of each cleanup material employed;
 - the total OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) x (100% - solvent retention factor**)] for each

ink/coating /fountain solution, plus (g) x (j) for each cleanup material], in pounds and tons per month;

l. the total volatile organic material usage for all ink, coatings, fountain solutions and cleanup materials employed calculated by summing the records of [(b) x (e) plus (g) x (j)] for each ink, coating, fountain solution and cleanup material, in pounds and tons per month;

m. the updated rolling, 12-month summation of volatile organic material usage and OC/VOC emissions from all ink, coatings, fountain solutions and cleanup materials employed, in tons (this shall include the information for the current month and the preceding eleven calendar months);

n. the total individual HAP emissions for each HAP from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (c) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution, plus the sum of (h) x (j) for each cleanup material];

o. the total combined HAP emissions from all inks, coatings, fountain solutions and cleanup materials employed, in pounds or tons per month [the sum of (d) x (e) x (100%- solvent retention factor**) for each ink/coating/fountain solution plus the sum of (i) x (j) for each cleanup material];

p. the updated rolling, 12-month summation of emissions for each individual HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months); and

q. the updated rolling, 12-month summation of emissions for total combined HAP, in pounds or tons (this shall include the information for the current month and the preceding eleven calendar months).

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Cleveland Division of Air Quality contact. This information does not have to be kept on an individual emissions unit basis.

D. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) 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 Cleveland DAQ within 30 days following the end of the calendar month.
2. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the rolling, 12-month VOC emission limitation for this emissions unit. The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.
3. The permittee shall submit annual reports that include the total VOC emissions, in tons for this emissions unit. These reports shall be submitted by April 15 of each year and shall cover the previous calendar year.
4. The permittee shall submit deviation (excursion) reports to the Cleveland DAQ which include the following information for the facility (see A.2.c):
 - a. an identification of each month during which the rolling, 12-month individual HAP emissions exceed 9.9 tons/yr based on a rolling, 12-month summation;
 - b. an identification of each month during which the rolling, 12-month combined HAP emissions exceed 24.9 tons/yr based on a rolling, 12-month summation; and
 - c. an identification of each month during which the rolling, 12-month OC/VOC emissions exceed 97.1 tons/yr based on a rolling, 12-month summation.

The deviation (excursion) report shall be submitted within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
2.9 lbs of VOC/gallon coating, excluding water and exempt solvents

Applicable Compliance Method:
Compliance shall be determined based upon the records required pursuant to section C.1.
Emission Limitation:
8.58 pounds/hour of VOC emissions

Applicable Compliance Method:
This emission limitation was established by multiplying the emissions unit's maximum hourly adhesive application rate by the worst case adhesive VOC content. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.
Emission Limitation:
15.0 tons of VOC emissions/rolling, 12-month period

Applicable Compliance Method:
Compliance shall be determined based upon the records required pursuant to section C.1.
Emission Limitation:
97.1 tons OC/VOC per rolling, 12-month period for this facility

Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in section C.6 and 7.
Emission Limitation:
9.9 tons individual HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.7.

Emission Limitation:

24.9 tons combined HAP emissions per rolling, 12-month period for this facility

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in section C.7.

2. Formulation data or USEPA Method 24 shall be used to determine the VOC contents for the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. **Miscellaneous Requirements**

1. None