

Facility ID: 1576011509 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 K001](#)
- [Go to Part II for Emissions Unit K004](#)
- [Go to Part II for Emissions Unit K005](#)
- [Go to Part II for Emissions Unit K006](#)
- [Go to Part II for Emissions Unit K007](#)
- [Go to Part II for Emissions Unit K008](#)

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Facility ID: 1576011509 Emissions Unit ID: K001 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>
Printing Press 1-6 color flexographic printing press used to print on flexible substrates; Buckeye Flexographic Press #4	OAC rule 3745-31-05(A)(3)	The organic compound (OC) emissions shall not exceed 100 pounds/hour and 55.2 tons/year.  The total water-based ink usage for emissions units K001, K004, K005, K006, K007 and K008 shall consist of at least 60% of the overall ink usage on a monthly basis.
	OAC rule 3745-35-07(B)	See section 2.c. below. The combined emissions of OC from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons per year, based upon a rolling, 365-day summation of the daily emissions.
	OAC rule 3745-21-09(Y)	See sections 2.a. and 2.b below. Any printing line that is located at a facility in which the total maximum usage of coatings and inks in all flexographic, packaging rotogravure and publication rotogravure printing lines is less than or equal to 148 tons/year is exempt from this rule.

**2. Additional Terms and Conditions**

- (a) The combined annual emissions from the entire facility (K001, K004-K008) shall not exceed the following as rolling 12-month summations:
  - 24.9 tons of all hazardous air pollutants (HAP); and
  - 9.9 tons of any individual HAP.
 This allowable includes any solvent used to make the ink press ready and for press parts and worker cleanup. The permittee has existing records (from the past year) that demonstrate compliance with the restricted OC and HAPs emissions of this PTI; therefore, month-to-month limitations are not needed for the first 12 months after issuance of this permit.  
 A water-based ink shall be defined as an ink in which the organic compound content of the volatile matter is less than 25% of the total volume of the volatile matter in the ink (prior to the addition of any thinning solvents). Compliance with this term shall be determined by calculating the gallons (prior to the addition of any thinning solvents) of the solvent-based ink used per month as a percentage of the sum of the gallons of solvent-based inks (prior to the addition of any thinning solvents) and the gallons of water-based ink (prior to the addition of any solvents) per month.

**B. Operational Restrictions**

1. None
- C. Monitoring and/or Record Keeping Requirements**
1. The permittee shall collect and record the following information each day for emissions units K001, K004, K005, K006, K007 and K008 (records do not have to be maintained for individual presses):
    - a. the company identification for each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
    - b. the number of gallons of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
    - c. the organic compound content of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
    - d. the total OC emissions from all ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity, in pounds or tons;
    - e. the water content of any ink employed (prior to the addition of any thinning solvents);
    - f. the individual HAP content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;
    - g. the total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied (sum all individual HAP contents from (f));
    - h. the individual HAP content for each HAP of each cleanup solvent, in pounds of individual HAP per gallon of cleanup solvent, as applied;
    - i. the total combined HAP content of each cleanup solvent, in pounds of combined HAPs per gallon of cleanup solvent, as applied (sum all individual HAP contents from (h));
    - j. the individual HAP content for each HAP of each solvent added to maintain viscosity, in pounds of individual HAP per gallon of solvent added to maintain viscosity, as applied;
      - k. the total combined HAP content of each solvent added to maintain viscosity, in pounds of combined HAPs per gallon of solvent added to maintain viscosity, as applied (sum all individual HAP contents from (i));
      - l. the total individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
      - m. the total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
      - n. the rolling, 365-day summation of the total OC emissions from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per year;
      - o. the rolling, 12-month summation of individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
      - p. the rolling, 12-month summation of total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
      - q. a calculation of the percentage of inks employed that are water-based inks (see section A.2.b.); and
      - r. the total tons of ink used. (This shall include any initial thinning solvents, including water, used to get the ink press ready. It shall not include any solvents used to maintain viscosity.
- D. Reporting Requirements**
1. The permittee shall submit deviation (excursion) reports that identify the following:
    - a. all exceedances of the rolling, 365-day emission limitation for OC;
    - b. all exceedances of the rolling, 12-month facility emission limitation for individual HAPs and combined HAPs;
    - c. an identification of each month that showed a violation of the limit of no more than 40% of the gallons of inks employed can be solvent-based inks and the actual percentage of solvent-based inks employed for each such month; and
    - d. an identification of any year in which the annual ink usage exceeds a total of 148 tons from all emissions units at this facility. This ink usage shall include any initial thinning solvents, including water, used to make the ink press ready. It shall not include any solvents used to maintain viscosity.
  2. The permittee shall submit an annual report that specifies the total organic compound emissions rate from emissions units K001, K004, K005, K006, K007 & K008 for each month of the previous calendar year. The permittee shall also submit an annual report that specifies the tons of ink and coatings employed at this facility in all flexographic, packaging rotogravure and publication rotogravure printing lines during the previous calendar year. These reports shall be submitted by January 31 of each year.
- E. Testing Requirements**
1. Compliance with the emission limitation(s) in section A.I. of these terms and conditions shall be determined in accordance with the following methods(s):  
Emissions Limitation:  
  
Organic compound emissions shall not exceed 100 pounds/hour.

## Applicable Compliance Method:

This limit was based on a one-time calculation of the maximum emissions that can be generated by this emissions unit.

## Emissions Limitation:

Organic compound emissions shall not exceed 55.2 tons/year.

## Applicable Compliance Method:

K001, K004, K005, K006, K007 and K008 are limited to a total of 55.2 tons OC emissions per year. Compliance with this limit will ensure compliance with the 55.2 tons OC/yr limit for K008.

## Emissions Limitation:

Requirement that at least 60% of the inks used in emissions units K001, K004, K005, K006, K007 and K008 be water-based inks.

## Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping as specified in section C.1.q.

## Emissions Limitation:

The total OC emissions from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons/year, based upon a rolling, 365-day summation of the OC emissions.

## Applicable Compliance Method:

Daily records shall be maintained of the OC contents of all coatings, cleanup solvents and solvents used to maintain viscosity employed, the daily usage of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated daily total OC emission rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility. The mass of organic compounds per volume of each coating shall be determined in accordance with the procedures in OAC rule 3745-21-10(B) and OAC rule 3745-21-04(B)(5). The OC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall 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.

## Emissions Limitation

The combined annual HAPs emissions from the entire facility (K001 and K004-K008) shall not exceed 24.9 tons as a rolling, 12-month summation.

## Applicable Compliance Method

Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.

## Emission Limitation

The annual individual HAP emissions from the entire facility (K001 and K004-K008) shall not exceed 9.9 tons as a rolling, 12-month summation.

## Applicable Compliance Method

Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.

F. **Miscellaneous Requirements**

1. None

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Facility ID: 1576011509 Emissions Unit ID: K004 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Printing Press 2 color flexographic printing press used to print on flexible substrates; Buckeye Flexographic Press #3	OAC rule 3745-31-05(A)(3)	The organic compound (OC) emissions shall not exceed 100 pounds/hour and 55.2 tons/year.  The total water-based ink usage for emissions units K001, K004, K005, K006, K007 and K008 shall consist of at least 60% of the overall ink usage on a monthly basis.
	OAC rule 3745-35-07(B)	See section 2.c. below. The combined emissions of OC from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons per year, based upon a rolling, 365-day summation of the daily emissions.
	OAC rule 3745-21-09(Y)	See sections 2.a. and 2.b below. Any printing line that is located at a facility in which the total maximum usage of coatings and inks in all flexographic, packaging rotogravure and publication rotogravure printing lines is less than or equal to 148 tons/year is exempt from this rule.

**2. Additional Terms and Conditions**

- (a) The combined annual emissions from the entire facility (K001, K004-K008) shall not exceed the following as rolling 12-month summations:
  - 24.9 tons of all hazardous air pollutants (HAP); and
  - 9.9 tons of any individual HAP.

This allowable includes any solvent used to make the ink press ready and for press parts and worker cleanup. The permittee has existing records (from the past year) that demonstrate compliance with the restricted OC and HAPs emissions of this PTI; therefore, month-to-month limitations are not needed for the first 12 months after issuance of this permit.

A water-based ink shall be defined as an ink in which the organic compound content of the volatile matter is less than 25% of the total volume of the volatile matter in the ink (prior to the addition of any thinning solvents). Compliance with this term shall be determined by calculating the gallons (prior to the addition of any thinning solvents) of the solvent-based ink used per month as a percentage of the sum of the gallons of solvent-based inks (prior to the addition of any thinning solvents) and the gallons of water-based ink (prior to the addition of any solvents) per month.

**B. Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each day for emissions units K001, K004, K005, K006, K007 and K008 (records do not have to be maintained for individual presses):
  - a. the company identification for each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - b. the number of gallons of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - c. the organic compound content of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - d. the total OC emissions from all ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity, in pounds or tons;
  - e. the water content of any ink employed (prior to the addition of any thinning solvents);
  - f. the individual HAP content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;
  - g. the total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied (sum all individual HAP contents from (f));
  - h. the individual HAP content for each HAP of each cleanup solvent, in pounds of individual HAP per gallon of cleanup solvent, as applied;
  - i. the total combined HAP content of each cleanup solvent, in pounds of combined HAPs per gallon of cleanup solvent, as applied (sum all individual HAP contents from (h));
  - j. the individual HAP content for each HAP of each solvent added to maintain viscosity, in pounds of individual HAP per gallon of solvent added to maintain viscosity, as applied;
  - k. the total combined HAP content of each solvent added to maintain viscosity, in pounds of combined HAPs per gallon of solvent added to maintain viscosity, as applied (sum all individual HAP contents from (i));

- I. the total individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
  - m. the total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
  - n. the rolling, 365-day summation of the total OC emissions from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per year;
  - o. the rolling, 12-month summation of individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
  - p. the rolling, 12-month summation of total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
  - q. a calculation of the percentage of inks employed that are water-based inks (see section A.2.b.); and
  - r. the total tons of ink used. (This shall include any initial thinning solvents, including water, used to get the ink press ready. It shall not include any solvents used to maintain viscosity.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 365-day emission limitation for OC;
  - b. all exceedances of the rolling, 12-month facility emission limitation for individual HAPs and combined HAPs;
  - c. an identification of each month that showed a violation of the limit of no more than 40% of the gallons of inks employed can be solvent-based inks and the actual percentage of solvent-based inks employed for each such month; and
  - d. an identification of any year in which the annual ink usage exceeds a total of 148 tons from all emissions units at this facility. This ink usage shall include any initial thinning solvents, including water, used to make the ink press ready. It shall not include any solvents used to maintain viscosity.
2. The permittee shall submit an annual report that specifies the total organic compound emissions rate from emissions units K001, K004, K005, K006, K007 & K008 for each month of the previous calendar year. The permittee shall also submit an annual report that specifies the tons of ink and coatings employed at this facility in all flexographic, packaging rotogravure and publication rotogravure printing lines during the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

Emissions Limitation:

Organic compound emissions shall not exceed 100 pounds/hour.

Applicable Compliance Method:

This limit was based on a one-time calculation of the maximum emissions that can be generated by this emissions unit.

Emissions Limitation:

Organic compound emissions shall not exceed 55.2 tons/year.

Applicable Compliance Method:

K001, K004, K005, K006, K007 and K008 are limited to a total of 55.2 tons OC emissions per year. Compliance with this limit will ensure compliance with the 55.2 tons OC/yr limit for K008.

Emissions Limitation:

Requirement that at least 60% of the inks used in emissions units K001, K004, K005, K006, K007 and K008 be water-based inks.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping as specified in section C.1.q.

Emissions Limitation:

The total OC emissions from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons/year, based upon a rolling, 365-day summation of the OC emissions.

Applicable Compliance Method:

Daily records shall be maintained of the OC contents of all coatings, cleanup solvents and solvents used to maintain viscosity employed, the daily usage of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated daily total OC emission rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility. The mass of organic compounds per volume of each coating shall be determined in accordance with the procedures in OAC rule 3745-21-10(B) and OAC rule 3745-21-04(B)(5). The OC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall 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.

Emissions Limitation

The combined annual HAPs emissions from the entire facility (K001 and K004-K008) shall not exceed 24.9 tons as a rolling, 12-month summation.

Applicable Compliance Method

Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.

Emission Limitation

The annual individual HAP emissions from the entire facility (K001 and K004-K008) shall not exceed 9.9 tons as a rolling, 12-month summation.

Applicable Compliance Method

Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.

F. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1576011509 Emissions Unit ID: K005 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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- 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>
Printing Press 1-6 color flexographic printing press used to print on flexible substrates; Buckeye Flexographic Press #5	OAC rule 3745-31-05(A)(3)	The organic compound (OC) emissions shall not exceed 100 pounds/hour and 55.2 tons/year.  The total water-based ink usage for emissions units K001, K004, K005, K006, K007 and K008 shall consist of at least 60% of the overall ink usage on a monthly basis.
	OAC rule 3745-35-07(B)	See section 2.c. below. The combined emissions of OC from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons per year, based upon a rolling, 365-day summation of the daily emissions.
	OAC rule 3745-21-09(Y)	See sections 2.a. and 2.b below. Any printing line that is located at a facility in which the total maximum usage of coatings and inks in all flexographic, packaging rotogravure and publication rotogravure printing lines is less than or equal to 148 tons/year is exempt from this rule.

2. **Additional Terms and Conditions**

- (a) The combined annual emissions from the entire facility (K001, K004-K008) shall not exceed the following as rolling 12-month summations:
  - 24.9 tons of all hazardous air pollutants (HAP); and
  - 9.9 tons of any individual HAP.

This allowable includes any solvent used to make the ink press ready and for press parts and worker cleanup. The permittee has existing records (from the past year) that demonstrate compliance with the restricted OC and HAPs emissions of this PTI; therefore, month-to-month limitations are not needed for the first 12 months after issuance of this permit.

A water-based ink shall be defined as an ink in which the organic compound content of the volatile matter is less than 25% of the total volume of the volatile matter in the ink (prior to the addition of any thinning solvents). Compliance with this term shall be determined by calculating the gallons (prior to the addition of any thinning solvents) of the solvent-based ink used per month as a percentage of the sum of the gallons of solvent-based inks (prior to the addition of any thinning solvents) and the gallons of water-based ink (prior to the addition of any solvents) per month.

**B. Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each day for emissions units K001, K004, K005, K006, K007 and K008 (records do not have to be maintained for individual presses):
- a. the company identification for each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - b. the number of gallons of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - c. the organic compound content of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - d. the total OC emissions from all ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity, in pounds or tons;
  - e. the water content of any ink employed (prior to the addition of any thinning solvents);
  - f. the individual HAP content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;
  - g. the total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied (sum all individual HAP contents from (f));
  - h. the individual HAP content for each HAP of each cleanup solvent, in pounds of individual HAP per gallon of cleanup solvent, as applied;
  - i. the total combined HAP content of each cleanup solvent, in pounds of combined HAPs per gallon of cleanup solvent, as applied (sum all individual HAP contents from (h));
  - j. the individual HAP content for each HAP of each solvent added to maintain viscosity, in pounds of individual HAP per gallon of solvent added to maintain viscosity, as applied;
  - k. the total combined HAP content of each solvent added to maintain viscosity, in pounds of combined HAPs per gallon of solvent added to maintain viscosity, as applied (sum all individual HAP contents from (i));
  - l. the total individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
  - m. the total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
  - n. the rolling, 365-day summation of the total OC emissions from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per year;
  - o. the rolling, 12-month summation of individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
  - p. the rolling, 12-month summation of total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
  - q. a calculation of the percentage of inks employed that are water-based inks (see section A.2.b.); and
  - r. the total tons of ink used. (This shall include any initial thinning solvents, including water, used to get the ink press ready. It shall not include any solvents used to maintain viscosity.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify the following:
- a. all exceedances of the rolling, 365-day emission limitation for OC;
  - b. all exceedances of the rolling, 12-month facility emission limitation for individual HAPs and combined HAPs;
  - c. an identification of each month that showed a violation of the limit of no more than 40% of the gallons of inks employed can be solvent-based inks and the actual percentage of solvent-based inks employed for each such month; and
  - d. an identification of any year in which the annual ink usage exceeds a total of 148 tons from all emissions units at this facility. This ink usage shall include any initial thinning solvents, including water, used to make the ink press ready. It shall not include any solvents used to maintain viscosity.
2. The permittee shall submit an annual report that specifies the total organic compound emissions rate from

emissions units K001, K004, K005, K006, K007 & K008 for each month of the previous calendar year. The permittee shall also submit an annual report that specifies the tons of ink and coatings employed at this facility in all flexographic, packaging rotogravure and publication rotogravure printing lines during the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

Organic compound emissions shall not exceed 100 pounds/hour.

Applicable Compliance Method:

This limit was based on a one-time calculation of the maximum emissions that can be generated by this emissions unit.

Emissions Limitation:

Organic compound emissions shall not exceed 55.2 tons/year.

Applicable Compliance Method:

K001, K004, K005, K006, K007 and K008 are limited to a total of 55.2 tons OC emissions per year. Compliance with this limit will ensure compliance with the 55.2 tons OC/yr limit for K008.

Emissions Limitation:

Requirement that at least 60% of the inks used in emissions units K001, K004, K005, K006, K007 and K008 be water-based inks.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping as specified in section C.1.q.

Emissions Limitation:

The total OC emissions from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons/year, based upon a rolling, 365-day summation of the OC emissions.

Applicable Compliance Method:

Daily records shall be maintained of the OC contents of all coatings, cleanup solvents and solvents used to maintain viscosity employed, the daily usage of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated daily total OC emission rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility. The mass of organic compounds per volume of each coating shall be determined in accordance with the procedures in OAC rule 3745-21-10(B) and OAC rule 3745-21-04(B)(5). The OC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall 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.

Emissions Limitation

The combined annual HAPs emissions from the entire facility (K001 and K004-K008) shall not exceed 24.9 tons as a rolling, 12-month summation.

Applicable Compliance Method

Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.

Emission Limitation

The annual individual HAP emissions from the entire facility (K001 and K004-K008) shall not exceed 9.9 tons as a rolling, 12-month summation.

Applicable Compliance Method

Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.

**F. Miscellaneous Requirements**

1. None

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Facility ID: 1576011509 Emissions Unit ID: K006 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Printing Press 1-6 color flexographic printing press used to print on flexible substrates; Buckeye Flexographic Press #6	OAC rule 3745-31-05(A)(3)	The organic compound (OC) emissions shall not exceed 100 pounds/hour and 55.2 tons/year.  The total water-based ink usage for emissions units K001, K004, K005, K006, K007 and K008 shall consist of at least 60% of the overall ink usage on a monthly basis.
	OAC rule 3745-35-07(B)	See section 2.c. below. The combined emissions of OC from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons per year, based upon a rolling, 365-day summation of the daily emissions.
	OAC rule 3745-21-09(Y)	See sections 2.a. and 2.b below. Any printing line that is located at a facility in which the total maximum usage of coatings and inks in all flexographic, packaging rotogravure and publication rotogravure printing lines is less than or equal to 148 tons/year is exempt from this rule.

**2. Additional Terms and Conditions**

- (a) The combined annual emissions from the entire facility (K001, K004-K008) shall not exceed the following as rolling 12-month summations:
  - 24.9 tons of all hazardous air pollutants (HAP); and
  - 9.9 tons of any individual HAP.

This allowable includes any solvent used to make the ink press ready and for press parts and worker cleanup. The permittee has existing records (from the past year) that demonstrate compliance with the restricted OC and HAPs emissions of this PTI; therefore, month-to-month limitations are not needed for the first 12 months after issuance of this permit.

A water-based ink shall be defined as an ink in which the organic compound content of the volatile matter is less than 25% of the total volume of the volatile matter in the ink (prior to the addition of any thinning solvents). Compliance with this term shall be determined by calculating the gallons (prior to the addition of any thinning solvents) of the solvent-based ink used per month as a percentage of the sum of the gallons of solvent-based inks (prior to the addition of any thinning solvents) and the gallons of water-based ink (prior to the addition of any solvents) per month.

**B. Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each day for emissions units K001, K004, K005, K006, K007 and K008 (records do not have to be maintained for individual presses):
  - a. the company identification for each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - b. the number of gallons of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - c. the organic compound content of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - d. the total OC emissions from all ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity, in pounds or tons;
  - e. the water content of any ink employed (prior to the addition of any thinning solvents);
  - f. the individual HAP content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;
  - g. the total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied

(sum all individual HAP contents from (f));

- h. the individual HAP content for each HAP of each cleanup solvent, in pounds of individual HAP per gallon of cleanup solvent, as applied;
- i. the total combined HAP content of each cleanup solvent, in pounds of combined HAPs per gallon of cleanup solvent, as applied (sum all individual HAP contents from (h));
- j. the individual HAP content for each HAP of each solvent added to maintain viscosity, in pounds of individual HAP per gallon of solvent added to maintain viscosity, as applied;
- k. the total combined HAP content of each solvent added to maintain viscosity, in pounds of combined HAPs per gallon of solvent added to maintain viscosity, as applied (sum all individual HAP contents from (i));
- l. the total individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
- m. the total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
- n. the rolling, 365-day summation of the total OC emissions from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per year;
- o. the rolling, 12-month summation of individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
- p. the rolling, 12-month summation of total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
- q. a calculation of the percentage of inks employed that are water-based inks (see section A.2.b.); and
- r. the total tons of ink used. (This shall include any initial thinning solvents, including water, used to get the ink press ready. It shall not include any solvents used to maintain viscosity.)

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 365-day emission limitation for OC;
  - b. all exceedances of the rolling, 12-month facility emission limitation for individual HAPs and combined HAPs;
  - c. an identification of each month that showed a violation of the limit of no more than 40% of the gallons of inks employed can be solvent-based inks and the actual percentage of solvent-based inks employed for each such month; and
  - d. an identification of any year in which the annual ink usage exceeds a total of 148 tons from all emissions units at this facility. This ink usage shall include any initial thinning solvents, including water, used to make the ink press ready. It shall not include any solvents used to maintain viscosity.
2. The permittee shall submit an annual report that specifies the total organic compound emissions rate from emissions units K001, K004, K005, K006, K007 & K008 for each month of the previous calendar year. The permittee shall also submit an annual report that specifies the tons of ink and coatings employed at this facility in all flexographic, packaging rotogravure and publication rotogravure printing lines during the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

Emissions Limitation:

Organic compound emissions shall not exceed 100 pounds/hour.

Applicable Compliance Method:

This limit was based on a one-time calculation of the maximum emissions that can be generated by this emissions unit.

Emissions Limitation:

Organic compound emissions shall not exceed 55.2 tons/year.

Applicable Compliance Method:

K001, K004, K005, K006, K007 and K008 are limited to a total of 55.2 tons OC emissions per year. Compliance with this limit will ensure compliance with the 55.2 tons OC/yr limit for K008.

Emissions Limitation:

Requirement that at least 60% of the inks used in emissions units K001, K004, K005, K006, K007 and K008 be water-based inks.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping as specified in section C.1.q.

Emissions Limitation:

The total OC emissions from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons/year, based upon a rolling, 365-day summation of the OC emissions.

## Applicable Compliance Method:

Daily records shall be maintained of the OC contents of all coatings, cleanup solvents and solvents used to maintain viscosity employed, the daily usage of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated daily total OC emission rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility. The mass of organic compounds per volume of each coating shall be determined in accordance with the procedures in OAC rule 3745-21-10(B) and OAC rule 3745-21-04(B)(5). The OC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall 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.

## Emissions Limitation

The combined annual HAPs emissions from the entire facility (K001 and K004-K008) shall not exceed 24.9 tons as a rolling, 12-month summation.

## Applicable Compliance Method

Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.

## Emission Limitation

The annual individual HAP emissions from the entire facility (K001 and K004-K008) shall not exceed 9.9 tons as a rolling, 12-month summation.

## Applicable Compliance Method

Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.

F. **Miscellaneous Requirements**

1. None

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Facility ID: 1576011509 Emissions Unit ID: K007 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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

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

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

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

**Operations, Property, and/or Equipment**   **Applicable Rules/Requirements**

Printing Press 1-6 color flexographic printing OAC rule 3745-31-05(A)(3)  
press used to print on flexible substrates;  
Buckeye Flexographic Press #7

OAC rule 3745-35-07(B)

**Applicable Emissions Limitations/Control Measures**

The organic compound (OC) emissions shall not exceed 100 pounds/hour and 55.2 tons/year.

The total water-based ink usage for emissions units K001, K004, K005, K006, K007 and K008 shall consist of at least 60% of the overall ink usage on a monthly basis.

See section 2.c. below.

The combined emissions of OC from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons per year, based upon a rolling, 365-day summation of the daily emissions.

See sections 2.a. and 2.b below.

OAC rule 3745-21-09(Y)

Any printing line that is located at a facility in which the total maximum usage of coatings and inks in all flexographic, packaging rotogravure and publication rotogravure printing lines is less than or equal to 148 tons/year is exempt from this rule.

**2. Additional Terms and Conditions**

- (a) The combined annual emissions from the entire facility (K001, K004-K008) shall not exceed the following as rolling 12-month summations:

24.9 tons of all hazardous air pollutants (HAP); and  
9.9 tons of any individual HAP.

This allowable includes any solvent used to make the ink press ready and for press parts and worker cleanup. The permittee has existing records (from the past year) that demonstrate compliance with the restricted OC and HAPs emissions of this PTI; therefore, month-to-month limitations are not needed for the first 12 months after issuance of this permit.

A water-based ink shall be defined as an ink in which the organic compound content of the volatile matter is less than 25% of the total volume of the volatile matter in the ink (prior to the addition of any thinning solvents). Compliance with this term shall be determined by calculating the gallons (prior to the addition of any thinning solvents) of the solvent-based ink used per month as a percentage of the sum of the gallons of solvent-based inks (prior to the addition of any thinning solvents) and the gallons of water-based ink (prior to the addition of any solvents) per month.

**B. Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each day for emissions units K001, K004, K005, K006, K007 and K008 (records do not have to be maintained for individual presses):
- a. the company identification for each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - b. the number of gallons of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - c. the organic compound content of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - d. the total OC emissions from all ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity, in pounds or tons;
  - e. the water content of any ink employed (prior to the addition of any thinning solvents);
  - f. the individual HAP content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;
  - g. the total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied (sum all individual HAP contents from (f));
  - h. the individual HAP content for each HAP of each cleanup solvent, in pounds of individual HAP per gallon of cleanup solvent, as applied;
  - i. the total combined HAP content of each cleanup solvent, in pounds of combined HAPs per gallon of cleanup solvent, as applied (sum all individual HAP contents from (h));
  - j. the individual HAP content for each HAP of each solvent added to maintain viscosity, in pounds of individual HAP per gallon of solvent added to maintain viscosity, as applied;
  - k. the total combined HAP content of each solvent added to maintain viscosity, in pounds of combined HAPs per gallon of solvent added to maintain viscosity, as applied (sum all individual HAP contents from (i));
  - l. the total individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
  - m. the total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
  - n. the rolling, 365-day summation of the total OC emissions from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per year;
  - o. the rolling, 12-month summation of individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
  - p. the rolling, 12-month summation of total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
  - q. a calculation of the percentage of inks employed that are water-based inks (see section A.2.b.); and
  - r. the total tons of ink used. (This shall include any initial thinning solvents, including water, used to get the ink press ready. It shall not include any solvents used to maintain viscosity.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify the following:

- a. all exceedances of the rolling, 365-day emission limitation for OC;
  - b. all exceedances of the rolling, 12-month facility emission limitation for individual HAPs and combined HAPs;
  - c. an identification of each month that showed a violation of the limit of no more than 40% of the gallons of inks employed can be solvent-based inks and the actual percentage of solvent-based inks employed for each such month; and
  - d. an identification of any year in which the annual ink usage exceeds a total of 148 tons from all emissions units at this facility. This ink usage shall include any initial thinning solvents, including water, used to make the ink press ready. It shall not include any solvents used to maintain viscosity.
2. The permittee shall submit an annual report that specifies the total organic compound emissions rate from emissions units K001, K004, K005, K006, K007 & K008 for each month of the previous calendar year. The permittee shall also submit an annual report that specifies the tons of ink and coatings employed at this facility in all flexographic, packaging rotogravure and publication rotogravure printing lines during the previous calendar year. These reports shall be submitted by January 31 of each year.
- E. Testing Requirements**
1. Compliance with the emission limitation(s) in section A.I. of these terms and conditions shall be determined in accordance with the following methods(s):  
Emissions Limitation:  
  
Organic compound emissions shall not exceed 100 pounds/hour.  
  
Applicable Compliance Method:  
  
This limit was based on a one-time calculation of the maximum emissions that can be generated by this emissions unit.  
Emissions Limitation:  
  
Organic compound emissions shall not exceed 55.2 tons/year.  
  
Applicable Compliance Method:  
  
K001, K004, K005, K006, K007 and K008 are limited to a total of 55.2 tons OC emissions per year. Compliance with this limit will ensure compliance with the 55.2 tons OC/yr limit for K008.  
Emissions Limitation:  
  
Requirement that at least 60% of the inks used in emissions units K001, K004, K005, K006, K007 and K008 be water-based inks.  
  
Applicable Compliance Method:  
  
Compliance shall be demonstrated based upon the monitoring and record keeping as specified in section C.1.q.  
Emissions Limitation:  
  
The total OC emissions from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons/year, based upon a rolling, 365-day summation of the OC emissions.  
  
Applicable Compliance Method:  
  
Daily records shall be maintained of the OC contents of all coatings, cleanup solvents and solvents used to maintain viscosity employed, the daily usage of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated daily total OC emission rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility. The mass of organic compounds per volume of each coating shall be determined in accordance with the procedures in OAC rule 3745-21-10(B) and OAC rule 3745-21-04(B)(5). The OC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall 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.  
Emissions Limitation  
  
The combined annual HAPs emissions from the entire facility (K001 and K004-K008) shall not exceed 24.9 tons as a rolling, 12-month summation.  
  
Applicable Compliance Method  
  
Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.  
Emission Limitation  
The annual individual HAP emissions from the entire facility (K001 and K004-K008) shall not exceed 9.9 tons as a rolling, 12-month summation.  
  
Applicable Compliance Method  
Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.
- F. Miscellaneous Requirements**
1. None

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

Facility ID: 1576011509 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>
Printing Press 1-8 color flexographic printing press used to print on flexible substrates; Buckeye Flexographic Press #8	OAC rule 3745-31-05(A)(3)	The organic compound (OC) emissions shall not exceed 100 pounds/hour and 55.2 tons/year.  The total water-based ink usage for emissions units K001, K004, K005, K006, K007 and K008 shall consist of at least 60% of the overall ink usage on a monthly basis.
	OAC rule 3745-35-07(B)	See section 2.c. below. The combined emissions of OC from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons per year, based upon a rolling, 365-day summation of the daily emissions.
	OAC rule 3745-21-09(Y)	See sections 2.a. and 2.b below. Any printing line that is located at a facility in which the total maximum usage of coatings and inks in all flexographic, packaging rotogravure and publication rotogravure printing lines is less than or equal to 148 tons/year is exempt from this rule.

**2. Additional Terms and Conditions**

- (a) The combined annual emissions from the entire facility (K001, K004-K008) shall not exceed the following as rolling 12-month summations:
  - 24.9 tons of all hazardous air pollutants (HAP); and
  - 9.9 tons of any individual HAP.

This allowable includes any solvent used to make the ink press ready and for press parts and worker cleanup. The permittee has existing records (from the past year) that demonstrate compliance with the restricted OC and HAPs emissions of this PTI; therefore, month-to-month limitations are not needed for the first 12 months after issuance of this permit.

A water-based ink shall be defined as an ink in which the organic compound content of the volatile matter is less than 25% of the total volume of the volatile matter in the ink (prior to the addition of any thinning solvents). Compliance with this term shall be determined by calculating the gallons (prior to the addition of any thinning solvents) of the solvent-based ink used per month as a percentage of the sum of the gallons of solvent-based inks (prior to the addition of any thinning solvents) and the gallons of water-based ink (prior to the addition of any solvents) per month.

**B. Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each day for emissions units K001, K004, K005, K006, K007 and K008 (records do not have to be maintained for individual presses):
  - a. the company identification for each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
  - b. the number of gallons of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;

- c. the organic compound content of each ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity employed;
- d. the total OC emissions from all ink, cleanup solvent, initial thinning solvent (used to get the ink press ready), and solvent added to maintain viscosity, in pounds or tons;
- e. the water content of any ink employed (prior to the addition of any thinning solvents);
- f. the individual HAP content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;
- g. the total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied (sum all individual HAP contents from (f));
- h. the individual HAP content for each HAP of each cleanup solvent, in pounds of individual HAP per gallon of cleanup solvent, as applied;
- i. the total combined HAP content of each cleanup solvent, in pounds of combined HAPs per gallon of cleanup solvent, as applied (sum all individual HAP contents from (h));
- j. the individual HAP content for each HAP of each solvent added to maintain viscosity, in pounds of individual HAP per gallon of solvent added to maintain viscosity, as applied;
- k. the total combined HAP content of each solvent added to maintain viscosity, in pounds of combined HAPs per gallon of solvent added to maintain viscosity, as applied (sum all individual HAP contents from (i));
- l. the total individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
- m. the total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per month;
- n. the rolling, 365-day summation of the total OC emissions from all coatings, cleanup solvents and solvents used to maintain viscosity employed, in pounds or tons per year;
- o. the rolling, 12-month summation of individual HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
- p. the rolling, 12-month summation of total combined HAP usage from all coatings, cleanup solvents and solvents used to maintain viscosity, in pounds or tons per year;
- q. a calculation of the percentage of inks employed that are water-based inks (see section A.2.b.); and
- r. the total tons of ink used. (This shall include any initial thinning solvents, including water, used to get the ink press ready. It shall not include any solvents used to maintain viscosity.)

**D. Reporting Requirements**

- 1. The permittee shall submit deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 365-day emission limitation for OC;
  - b. all exceedances of the rolling, 12-month facility emission limitation for individual HAPs and combined HAPs;
  - c. an identification of each month that showed a violation of the limit of no more than 40% of the gallons of inks employed can be solvent-based inks and the actual percentage of solvent-based inks employed for each such month; and
  - d. an identification of any year in which the annual ink usage exceeds a total of 148 tons from all emissions units at this facility. This ink usage shall include any initial thinning solvents, including water, used to make the ink press ready. It shall not include any solvents used to maintain viscosity.
- 2. The permittee shall submit an annual report that specifies the total organic compound emissions rate from emissions units K001, K004, K005, K006, K007 & K008 for each month of the previous calendar year. The permittee shall also submit an annual report that specifies the tons of ink and coatings employed at this facility in all flexographic, packaging rotogravure and publication rotogravure printing lines during the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

- 1. Compliance with the emission limitation(s) in section A.I. of these terms and conditions shall be determined in accordance with the following methods(s):  
Emissions Limitation:  
  
Organic compound emissions shall not exceed 100 pounds/hour.  
  
Applicable Compliance Method:  
  
This limit was based on a one-time calculation of the maximum emissions that can be generated by this emissions unit.  
Emissions Limitation:  
  
Organic compound emissions shall not exceed 55.2 tons/year.  
  
Applicable Compliance Method:  
  
K001, K004, K005, K006, K007 and K008 are limited to a total of 55.2 tons OC emissions per year. Compliance

with this limit will ensure compliance with the 55.2 tons OC/yr limit for K008.

Emissions Limitation:

Requirement that at least 60% of the inks used in emissions units K001, K004, K005, K006, K007 and K008 be water-based inks.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping as specified in section C.1.q. Emissions Limitation:

The total OC emissions from emissions units K001, K004, K005, K006, K007 and K008 shall not exceed 55.2 tons/year, based upon a rolling, 365-day summation of the OC emissions.

Applicable Compliance Method:

Daily records shall be maintained of the OC contents of all coatings, cleanup solvents and solvents used to maintain viscosity employed, the daily usage of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated daily total OC emission rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility. The mass of organic compounds per volume of each coating shall be determined in accordance with the procedures in OAC rule 3745-21-10(B) and OAC rule 3745-21-04(B)(5). The OC content of each coating shall be determined using USEPA Methods 24 and 24A. If pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall 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.

Emissions Limitation

The combined annual HAPs emissions from the entire facility (K001 and K004-K008) shall not exceed 24.9 tons as a rolling, 12-month summation.

Applicable Compliance Method

Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.

Emission Limitation

The annual individual HAP emissions from the entire facility (K001 and K004-K008) shall not exceed 9.9 tons as a rolling, 12-month summation.

Applicable Compliance Method

Monthly records shall be maintained of the HAP content of each individual HAP of all coatings, cleanup solvents and solvents used to maintain viscosity employed, and the calculated monthly total HAP emissions rate for all coatings, cleanup solvents and solvents used to maintain viscosity employed in this facility.

**F. Miscellaneous Requirements**

1. None