

Facility ID: 1677000105 Issuance type: Title V Proposed Permit

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In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part III" and before "I. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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Part II - Specific Facility Terms and Conditions

a State and Federally Enforceable Section

1. JPS Packaging requested to restrict the emissions of any individual Hazardous Air Pollutant (HAP) to 9.9 tons per rolling, 12-month period, the emissions of total combined HAPs to 24.9 tons per rolling, 12-month period, and the emissions of volatile organic compound (VOC) to 249.9 tons per rolling, 12-month period. The company proposed these emission limitations to avoid PSD permitting and the Printing and Publishing MACT, 40 CFR Part 63, Subpart KK. JPS Packaging, has accepted these emission limitations as facility-wide caps for HAP and VOC emissions from emissions units K003, K005, K006, K008, K010, K012, K013, K014, K015, K016, K017, K018, T001, T002, and T003.
2. Compliance with the annual emission limitations for VOC, individual HAP, and total combined HAPs shall be based upon a rolling, 12-month summation of the monthly emissions.
3. In order to determine compliance with the facility-wide emission limitations, the permittee shall maintain monthly records of the following information for emissions units K003, K005, K006, K008, K010, K012, K013, K014, K015, K016, K017, K018, T001, T002, and T003:
 - a. For emissions units without control equipment (K012, K017, and K018):
 - i. the name and identification of each coating;
 - ii. the VOC content of each coating, in weight percent;
 - iii. the individual HAP content for each HAP of each coating, in weight percent;
 - iv. the total combined HAPs content of each coating, in weight percent (sum all the individual HAP contents from section 3.a.iii);
 - v. the total pounds of each coating employed;
 - vi. the name and identification of each solvent* employed;
 - vii. the VOC content of each solvent, in weight percent;
 - viii. the individual HAP content for each HAP of each solvent, in weight percent;
 - ix. the total combined HAPs content of each solvent, in weight percent (sum all the individual HAP contents from section 3.a.viii);
 - x. the total pounds of each solvent employed;
 - xi. the total uncontrolled individual HAP emissions for each HAP for all coatings and solvents employed, in tons per month (for each HAP, the sum of section 3.a.iii divided by 100 times section 3.a.v for each coating plus the sum of section 3.a.viii divided by 100 times section 3.a.x for each solvent, divided by 2000);
 - a. xii. the uncontrolled total combined HAPs emissions for all coatings and solvents employed, in tons per month (the sum of section 3.a.iv divided by 100 times section 3.a.v for each coating plus the sum of section 3.a.ix divided by 100 times section 3.a.x for each solvent, divided by 2000); and
 - xiii. the total uncontrolled VOC emissions for all coatings and solvents employed, in tons per month (the sum of section 3.a.ii divided by 100 times section 3.a.v for each coating plus the sum of section 3.a.vii divided by 100 times section 3.a.x for each solvent, divided by 2000).

*Solvent is defined as cleanup material and coating thinning material.
- b. For emissions units with control equipment (K003, K005, K006, K008, K010, K013, K014, K015, and K016):
 - i. the name and identification of each coating;

- ii. the VOC content of each coating in weight percent;
 - iii. the individual HAP content for each HAP of each coating, in weight percent;
 - iv. the total combined HAPs content of each coating, in weight percent (sum all the individual HAP contents from section 3.b.iii);
 - v. the total pounds of each coating employed;
 - vi. the name and identification of each solvent* employed;
 - vii. the VOC content of each solvent, in weight percent;
 - viii. the individual HAP content for each HAP of each solvent, in weight percent;
 - ix. the total combined HAPs content of each solvent, in weight percent (sum all the individual HAP contents from section 3.b.viii);
 - x. the total pounds of each solvent employed;
 - xi. the total uncontrolled individual HAP emissions for each HAP for all the coatings and solvents employed, in tons per month (for each HAP, the sum of section 3.b.iii divided by 100 times section 3.b.v for each coating plus the sum of section 3.b.viii divided by 100 times section 3.b.x for each solvent, divided by 2000);
- b.
 - xii. the uncontrolled total combined HAPs emissions for all the coatings and solvents employed, in tons per month (the sum of section 3.b.iv divided by 100 times section 3.b.v for each coating plus the sum of section 3.b.ix divided by 100 times section 3.b.x for each solvent, divided by 2000);
 - xiii. the total uncontrolled VOC accounted for in all coatings and solvents employed, in tons per month (the sum of section 3.b.ii divided by 100 times section 3.b.v for each coating plus the sum of section 3.b.vii divided by 100 times section 3.b.x for each solvent, divided by 2000);
 - xiv. the total number of coating waste drums;
 - xv. the total amount of VOC accounted for in the coating waste drums, in tons per month;
 - xvi. the total uncontrolled VOC emissions, in tons per month (section 3.b.xiii minus section 3.b.xv);
 - xvii. the linear feet of material produced by each emissions unit;
 - xviii. the total linear feet of material produced by all of emissions units that employ control equipment;
 - xix. if the uncontrolled individual HAP emission rate for any HAP is calculated to be greater than 9.9 tons per rolling, 12-month period, then the permittee shall calculate the total uncontrolled individual HAP emissions for each HAP for each emissions unit, in tons per month (for each emissions unit section 3.b.xvii divided by section 3.b.xviii and then multiplied by section 3.b.xi);
 - xx. if the uncontrolled total combined HAPs emission rate is calculated to be greater than 24.9 tons per rolling, 12-month period, then the permittee shall calculate the uncontrolled total combined HAPs emissions for each emissions unit, in tons per month (for each emissions unit section 3.b.xvii divided by section 3.b.xviii and then multiplied by section 3.b.xii);
 - xxi. the total VOC emissions for each emissions unit, in tons per month (for each emissions unit section 3.b.xvii divided by section 3.b.xviii and then multiplied by section 3.b.xvi);
 - xxii. if the uncontrolled individual HAP emission rate for any HAP is calculated to be greater than 9.9 tons per rolling, 12-month period, then the permittee shall calculate for each emissions unit the controlled individual HAP emission rate for all coatings and solvents, in pounds or tons (the controlled emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance);
 - xxiii. if the uncontrolled total combined HAPs emission rate is calculated to be greater than 24.9 tons per rolling, 12-month period, then the permittee shall calculate for each emissions unit the controlled total combined HAPs emission rate for all coatings and solvents, in pounds or tons (the controlled emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance);
 - xxiv. for each emissions unit, the calculated, controlled VOC emission rate for all coatings and solvents, in pounds or tons (the controlled emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance);
 - xxv. if the uncontrolled individual HAP emission rate for any HAP is calculated to be greater than 9.9 tons per rolling, 12-month period, then the permittee shall calculate the total controlled individual HAP emission rate for all the emissions units (sum all the calculated, controlled individual HAP emission rate for each emissions unit from section 3.b.xxii);
 - xxvi. if the uncontrolled total combined HAPs emission rate is calculated to be greater than 24.9 tons per rolling, 12-month period, then the permittee shall calculate the controlled total combined HAPs emission rate for all the emissions units (sum all the calculated, controlled total combined HAPs emission rate for each emissions unit from section 3.b.xxiii); and

xxvii. the total calculated, controlled VOC emission rate for all the emissions units (sum all the calculated, controlled VOC emission rate for each emissions unit from section 3.b.xxiv).

*Solvent is defined as cleanup material and coating thinning material.

- c. For total facility emissions:
- i. the total uncontrolled individual HAP emissions for each HAP for the entire facility, in tons per month (section 3.a.xi plus section 3.b.xi);
 - ii. the total uncontrolled combined HAPs emissions for the entire facility, in tons per month (section 3.a.xii plus section 3.a.xii);
 - iii. if the uncontrolled individual HAP emission rate for any HAP is calculated to be greater than 9.9 tons per rolling, 12-month period, then the permittee shall calculate the total individual HAP emissions for the entire facility, in tons per month (section 3.a.xi plus section 3.b.xxv);
 - iv. if the uncontrolled total combined HAPs emission rate is calculated to be greater than 24.9 tons per rolling, 12-month period, then the permittee shall calculate the total combined HAPs emissions for the entire facility, in tons per month (section 3.a.xii plus section 3.b.xxvi);
 - v. the total VOC emissions for the entire facility, in tons per month (section 3.a.xiii plus section 3.b.xxvii plus 3.0 tons per year* divided by 12);
- c. vi. the permittee shall record the rolling, 12-month summation of the monthly uncontrolled emissions of each individual HAP for the entire facility for each calendar month;
- vii. the permittee shall record the rolling, 12-month summation of the monthly uncontrolled emissions of total combined HAPs for the entire facility for each calendar month;
- viii. the permittee shall record the rolling, 12-month summation of the monthly emissions of VOC for the entire facility for each calendar month;
- ix. if the uncontrolled individual HAP emission rate for any HAP is calculated to be greater than 9.9 tons per rolling, 12-month period, then the permittee shall record the rolling, 12-month summation of the monthly controlled emissions of each individual HAP for the entire facility for each calendar month; and
- x. if the uncontrolled total combined HAPs emission rate is calculated to be greater than 24.9 tons per rolling, 12-month period, then the permittee shall record the rolling, 12-month summation of the monthly controlled emissions of total combined HAPs for the entire facility for each calendar month.

* The potential to emit for VOC for the three storage tanks (emissions units T001, T002, and T003) is 3.0 tons per year. The storage tanks do not store any HAPs.

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations for VOC, individual HAP, and total combined HAPs. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii.
5. The permittee shall submit annual reports that specify the following information:
- a. for the entire facility, the rolling, 12-month summations of monthly emissions of VOC, individual HAP, and total combined HAPs for each month during the calendar year (January through December); and
 - b. for each emissions unit, the VOC emission rate, in tons per year.

The annual reports shall be submitted by January 31 of each year, and shall cover the records for the previous calendar year (January through December). This reporting requirement may be satisfied by including and identifying the specific emission data (VOC, individual HAPs, and combined HAPs) for each emissions unit in the facility's annual Fee Emission Report.

6. Compliance with the emission limitations in section A.1 of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitations:
 - 9.9 tons of HAP per rolling, 12-month period
 - 24.9 tons of HAPs per rolling, 12-month period
 - 249.9 tons of VOC per rolling, 12-month period

Applicable Compliance Method:

Compliance with these emission limitations shall be demonstrated through the records required pursuant to sections A.3, A.3.a, A.3.b, and A.3.c of these terms and conditions.

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 section 4.3 of 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.

Formulation data shall be used to determine the HAP contents of the coatings and solvents.

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b State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

T001 - above ground storage tank;
T002 - above ground storage tank; and
T003 - above ground storage tank.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1677000105 Emissions Unit ID: K003 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
6-color flexographic printing press/outboard rotogravure station - W & H I controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2	OAC rule 3745-31-05(A)(3) (PTI 16-222)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-09(Y).
	OAC rule 3745-21-09(Y)	See A.I.2.a below.

2. Additional Terms and Conditions

- a. The printing line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - (a)
 - i. a capture efficiency which is at least 65 percent, by weight, for a flexographic printing line; and
 - ii. a control efficiency which is at least 90 percent, by weight.

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II. Operational Restrictions

1. The emissions from this emissions unit shall be vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2 when the emissions unit is in operation.
2. When thermal incinerator #1 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
3. When thermal incinerator #2 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
4. When catalytic incinerator #2 is in use, (a) the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance, and

- (b) the average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is operating at maximum conditions, shall not be less than 80 degrees Fahrenheit or shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2.
2. When thermal incinerator #1 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
3. When thermal incinerator #2 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. When catalytic incinerator #2 is in use, the permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
5. The permittee shall collect and record the following information for each day when thermal incinerator #1 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
6. The permittee shall collect and record the following information for each day when thermal incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
7. The permittee shall collect and record the following information for each day when catalytic incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum conditions) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - c. a log of the downtime for the capture (collection) system, catalytic incinerator, and monitoring equipment, when this emissions unit was in operation.

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly summaries of the following records:

- a. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #1 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
- b. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #2 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
- c. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
- d. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum condition) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
- e. a log of the downtime for the capture (collection) system, control devices, and monitoring equipment, when this emissions unit was in operation.

These quarterly summaries shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

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V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the 65 percent capture and 90 percent control efficiency limitations for VOC.
 - c. The test method(s) which must be employed to demonstrate compliance with the capture and control efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
 - f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1677000105 Emissions Unit ID: K003 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
2. Additional Terms and Conditions			
1.	None		

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1677000105 Emissions Unit ID: K005 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
6-color flexographic printing press - PC 2 - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2	OAC rule 3745-21-09(Y)	See A.I.2.a below.
2. Additional Terms and Conditions		
a. The printing line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):		
(a)		
i. a capture efficiency which is at least 65 percent, by weight, for a flexographic printing line; and		
ii. a control efficiency which is at least 90 percent, by weight.		

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II. Operational Restrictions

1. The emissions from this emissions unit shall be vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2 when the emissions unit is in operation.
2. When thermal incinerator #1 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
3. When thermal incinerator #2 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
4. When catalytic incinerator #2 is in use, (a) the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance, and (b) the average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is operating at maximum conditions, shall not be less than 80 degrees Fahrenheit or shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2.
2. When thermal incinerator #1 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
3. When thermal incinerator #2 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. When catalytic incinerator #2 is in use, the permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and

downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

5. The permittee shall collect and record the following information for each day when thermal incinerator #1 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
6. The permittee shall collect and record the following information for each day when thermal incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
7. The permittee shall collect and record the following information for each day when catalytic incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum conditions) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - c. a log of the downtime for the capture (collection) system, catalytic incinerator, and monitoring equipment, when this emissions unit was in operation.

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #1 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #2 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - c. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - d. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum condition) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - e. a log of the downtime for the capture (collection) system, control devices, and monitoring equipment, when this emissions unit was in operation.

These quarterly summaries shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

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V. **Testing Requirements**

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the 65 percent capture and 90 percent control efficiency limitations for VOC.
 - c. The test method(s) which must be employed to demonstrate compliance with the capture and control efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
 - f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677000105 Emissions Unit ID: K005 Issuance type: Title V Proposed Permit

B. **State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
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2. **Additional Terms and Conditions**

- 1. None

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1677000105 Emissions Unit ID: K006 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
6-color flexographic printing press - PC 3 - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2 and an in-line adhesive laminator - LAM 2 - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2	OAC rule 3745-31-05(A)(3) (PTI 16-068)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-09(Y).
	OAC rule 3745-21-09(Y)	See A.I.2.a below.

2. **Additional Terms and Conditions**

- a. The printing line shall be equipped with a capture system and associated control system which are

designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):

- (a)
- i. a capture efficiency which is at least 65 percent, by weight, for a flexographic printing line; and
 - ii. a control efficiency which is at least 90 percent, by weight.

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II. Operational Restrictions

1. The emissions from this emissions unit shall be vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2 when the emissions unit is in operation.
2. When thermal incinerator #1 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
3. When thermal incinerator #2 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
4. When catalytic incinerator #2 is in use, (a) the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance, and (b) the average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is operating at maximum conditions, shall not be less than 80 degrees Fahrenheit or shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2.
2. When thermal incinerator #1 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
3. When thermal incinerator #2 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. When catalytic incinerator #2 is in use, the permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
5. The permittee shall collect and record the following information for each day when thermal incinerator #1 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
6. The permittee shall collect and record the following information for each day when thermal incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment,

when this emissions unit was in operation.

7. The permittee shall collect and record the following information for each day when catalytic incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum conditions) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - c. a log of the downtime for the capture (collection) system, catalytic incinerator, and monitoring equipment, when this emissions unit was in operation.

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #1 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #2 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - c. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - d. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum condition) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - e. a log of the downtime for the capture (collection) system, control devices, and monitoring equipment, when this emissions unit was in operation.

These quarterly summaries shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

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V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the 65 percent capture and 90 percent control efficiency limitations for VOC.
 - c. The test method(s) which must be employed to demonstrate compliance with the capture and control efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
 - f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC

rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677000105 Emissions Unit ID: K006 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
2. Additional Terms and Conditions			
1.	None		

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1677000105 Emissions Unit ID: K008 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
6-color flexographic printing press with outboard rotogravure coater - W & H 2 - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2	OAC rule 3745-31-05(A)(3) (PTI 16-02024)	49.0 lbs/hr of volatile organic compounds (VOC) 25.0 tpy of VOC
	OAC rule 3745-21-09(Y)	See A.I.2.a below. See A.I.2.b below.

2. **Additional Terms and Conditions**

- a. The printing line shall be equipped with a capture system and associated control system which are designed and operated to achieve a control efficiency which is at least 90 percent, by weight, and an overall control efficiency which is at least 70 percent, by weight, for VOC.
- b. The emission control requirements based on this applicable rule are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05(A)(3).

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II. **Operational Restrictions**

- 1. The emissions from this emissions unit shall be vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2 when the emissions unit is in operation.
- 2. When thermal incinerator #1 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
- 3. When thermal incinerator #2 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
- 4. When catalytic incinerator #2 is in use, (a) the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature

during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance, and (b) the average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is operating at maximum conditions, shall not be less than 80 degrees Fahrenheit or shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2.
2. When thermal incinerator #1 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
3. When thermal incinerator #2 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. When catalytic incinerator #2 is in use, the permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
5. The permittee shall collect and record the following information for each day when thermal incinerator #1 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
6. The permittee shall collect and record the following information for each day when thermal incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
7. The permittee shall collect and record the following information for each day when catalytic incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum conditions) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - c. a log of the downtime for the capture (collection) system, catalytic incinerator, and monitoring equipment, when this emissions unit was in operation.
8. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the total number of hours this emissions unit was in operation; and
 - b. the average, controlled VOC emission rate for this emissions unit, in pounds per hour (A.3.b.xxiv of Part II - Specific Facility Terms and Conditions divided by A.III.8.a).

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #1 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #2 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - c. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - d. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum condition) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - e. a log of the downtime for the capture (collection) system, control devices, and monitoring equipment, when this emissions unit was in operation.

These quarterly summaries shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
3. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the VOC emissions exceeded 49.0 lbs/hr, and the actual average hourly VOC emissions for each such month.

The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
4. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

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V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for VOC (49.0 lbs/hr) and the overall control efficiency limitations for VOC (90% control and 70% overall).
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For VOC Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the overall efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
 - f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
5. Emission Limitation:
49.0 lbs/hr of VOC

Applicable Compliance Method:
Compliance with this emission limitation may be determined based upon the records required pursuant to section A.3.b of Part II - Specific Facility Terms and Conditions and section A.III.8 of the Terms and Conditions for this emissions unit. Compliance with this emission limitation shall be determined based upon the emission testing requirements specified in section A.V.1 of the Terms and Conditions for this emissions unit.
6. Emission Limitation:
25.0 tpy of VOC

Applicable Compliance Method:
Compliance with this emission limitation may be determined based upon the records required pursuant to Part II - Specific Facility Terms and Conditions section A.3.b of this permit.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677000105 Emissions Unit ID: K008 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
6-color flexographic printing press with outboard rotogravure coater - W & H 2 - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2		See B.III.1 below.

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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

1. The permit to install for this emissions unit (K008) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISC 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISC 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethyl alcohol

TLV (mg/m3): 1880
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 44761.9

Pollutant: ethyl acetate

TLV (mg/m3): 1440
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 34285.7

Pollutant: isopropyl alcohol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 23404.8

Pollutant: n-propyl acetate

TLV (mg/m3): 835
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 19881.0

Pollutant: methyl ethyl ketone

TLV (mg/m3): 590
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 14047.6

Pollutant: n-propyl alcohol

TLV (mg/m3): 492
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 11714.3

*The maximum hourly emission rate is the summation of the allowable mass emissions for K013 through K019 plus the 3.0 lbs/hr increase in the allowable for K008.

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:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
 If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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.

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1677000105 Emissions Unit ID: K010 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
6-color flexographic printing press with outboard laminator and backside printing - W & H 3 -controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2	OAC rule 3745-31-05 (PTI 16-01928 and 16-02024)	25.0 lbs/hr volatile organic compounds (VOC) 109 tpy VOC
	OAC rule 3745-21-09(Y)	See A.1.2.a below.

The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

- a. The printing line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - (a)
 - i. an overall control efficiency which is at least 70 percent, by weight; and
 - ii. a control efficiency which is at least 90 percent, by weight.

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II. Operational Restrictions

1. The emissions from this emissions unit shall be vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2 when the emissions unit is in operation.
2. When thermal incinerator #1 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
3. When thermal incinerator #2 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
4. When catalytic incinerator #2 is in use, (a) the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance, and (b) the average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is operating at maximum conditions, shall not be less than 80 degrees Fahrenheit or shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2.
2. When thermal incinerator #1 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
3. When thermal incinerator #2 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. When catalytic incinerator #2 is in use, the permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
5. The permittee shall collect and record the following information for each day when thermal incinerator #1 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
6. The permittee shall collect and record the following information for each day when thermal incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
7. The permittee shall collect and record the following information for each day when catalytic incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;

- b. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum conditions) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - c. a log of the downtime for the capture (collection) system, catalytic incinerator, and monitoring equipment, when this emissions unit was in operation.
8. The permittee shall collect and record the following information for each month for the emissions unit:
- a. the total number of hours this emissions unit was in operation; and
 - b. the average, controlled VOC emission rate for this emissions unit, in pounds per hour (A.3.b.xxiv of Part II - Specific Facility Terms and Conditions divided by A.III.8.a).

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #1 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #2 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - c. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - d. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum condition) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - e. a log of the downtime for the capture (collection) system, control devices, and monitoring equipment, when this emissions unit was in operation.

These quarterly summaries shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
3. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each period during which the average hourly VOC emissions exceeded 25.0 pounds per hour, and the actual average hourly VOC emissions for each such period.
4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

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V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for VOC (25.0 lbs/hr) and the overall control efficiency limitations for VOC (90% control and 70% overall).
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For VOC Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the overall efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the

determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

4. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

5. Emission Limitation:
25.0 lbs/hr VOC

Applicable Compliance Method:

Compliance with this emission limitation may be determined based upon the records required pursuant to section A.3.b of Part II - Specific Facility Terms and Conditions and section A.III.8 of the Terms and Conditions for this emissions unit. Compliance with this emission limitation shall be determined based upon the emission testing requirements specified in section A.V.1 of the Terms and Conditions for this emissions unit.

6. Emission Limitation:
109 tpy VOC

Applicable Compliance Method:

Compliance with this emission limitation may be determined based upon the records required pursuant to Part II - Specific Facility Terms and Conditions section A.3.b of this permit.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677000105 Emissions Unit ID: K010 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
6-color flexographic printing press with outboard laminator and backside printing -		See B.III.1 below.

W & H 3 -controlled with thermal incinerator
#1, thermal incinerator #2, or catalytic
incinerator #2

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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

1. The permit to install for this emissions unit (K010) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: n-propyl alcohol

TLV (mg/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 25.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 437.2

MAGLC (ug/m3): 11,714

Pollutant: n-propyl acetate

TLV (mg/m3): 835

Maximum Hourly Emission Rate (lbs/hr): 25.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 437.2

MAGLC (ug/m3): 19,881

Pollutant: ethyl acetate

TLV (mg/m3): 1,440

Maximum Hourly Emission Rate (lbs/hr): 25.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 437.2

MAGLC (ug/m3): 34,286

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 (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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.

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1677000105 Emissions Unit ID: K012 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
9-color flexographic printing press - COMCO 1	OAC rule 3745-31-05 (PTI 16-1575)	0.7 lb/hr of volatile organic compounds (VOC)
	OAC rule 3745-21-09(Y)	See A.I.2.a below.

2. Additional Terms and Conditions

- a. The volatile organic compound content of the coatings and inks shall not exceed the following limitations:
 - (a)
 - a. 40 percent VOC, by volume, of the coating or ink, excluding water and exempt solvents; or
 - b. 25 percent VOC, by volume, of the volatile matter in the coating or ink.

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II. **Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating and ink, as applied; and

- b. the VOC content in percentage VOC by volume of each coating and ink (excluding water and exempt solvents); or
- c. the VOC content in percentage VOC by volume of the volatile matter in each coating and ink.

(This information does not have to be kept on a line-by-line basis, unless one or more of the lines is a new emissions unit and subject to specific "gallons/year" and "tons/year" limitations, or just a "tons/year" limitation in a permit to install. In such cases, for each such new emissions unit only, the above-mentioned information must be maintained separately for that line. Also, if the permittee mixes complying coatings at a line, it is not necessary to record the VOC content of the resulting mixture.)

- 2. The permittee shall maintain monthly records of the following information:
 - a. the linear feet of material produced by this emissions unit;
 - b. the total linear feet of material produced by all of the emissions units that do not employ control equipment;
 - c. the total number of hours this emissions unit was in operation;
 - d. the average, uncontrolled VOC emission rate for this emissions unit, in pounds per month (A.III.2.a divided by A.III.2.b, and then multiplied by A.3.a.xiii of Part II - Specific Facility Terms and Conditions); and
 - e. the average, uncontrolled VOC emission rate for this emissions unit, in pounds per hour (A.III.2.d divided by A.III.2.c).

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IV. Reporting Requirements

- 1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings (for VOC content). The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
- 2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the VOC emissions exceeded 0.7 lb/hr, and the actual average hourly VOC emissions for each such month.
- 3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii of this permit.

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V. Testing Requirements

- 1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
40 percent VOC, by volume, of the coating and ink, excluding water or 25 percent VOC, by volume, of the volatile matter in the coating and ink

Applicable Compliance Method:
OAC rule 3745-21-10(B). 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 section 4.3 of 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.
 - b. Emission Limitation:
0.7 lb/hr of VOC

Applicable Compliance Method:
Compliance may be demonstrated using the record keeping as required by section A.III.2 of these terms and conditions or, if required, compliance shall be demonstrated through emission testing pursuant to OAC rule 3745-21-10(C).

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 1677000105 Emissions Unit ID: K012 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
2. Additional Terms and Conditions		
1. None		

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1677000105 Emissions Unit ID: K013 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
6-color flexographic printing press - W & H 4 - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2	OAC rule 3745-31-05 (PTI 16-02024)	30.0 lbs/hr of volatile organic compounds (VOC) 25.0 tpy of VOC See A.I.2.a below. See A.I.2.b below.
	OAC rule 3745-21-09(Y)	

2. **Additional Terms and Conditions**

- a. The printing line shall be equipped with a capture system and associated control system which are designed and operated to achieve a control efficiency which is at least 90 percent, by weight, and an overall control efficiency which is at least 70 percent by weight, for VOC.
- b. The emission control requirements based on this applicable rule are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05.

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II. **Operational Restrictions**

- The emissions from this emissions unit shall be vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2 when the emissions unit is in operation.
- When thermal incinerator #1 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
- When thermal incinerator #2 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
- When catalytic incinerator #2 is in use, (a) the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance, and (b) the average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is operating at maximum conditions, shall not be less than 80 degrees Fahrenheit or shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.

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

- The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2.
- When thermal incinerator #1 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
- When thermal incinerator #2 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
- When catalytic incinerator #2 is in use, the permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

necessary by the permittee.

5. The permittee shall collect and record the following information for each day when thermal incinerator #1 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
6. The permittee shall collect and record the following information for each day when thermal incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
7. The permittee shall collect and record the following information for each day when catalytic incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum conditions) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - c. a log of the downtime for the capture (collection) system, catalytic incinerator, and monitoring equipment, when this emissions unit was in operation.
8. The permittee shall collect and record the following information for each month for the emissions unit:
 - a. the total number of hours this emissions unit was in operation; and
 - b. the average, controlled VOC emission rate for this emissions unit, in pounds per hour (A.3.b.xxiv of Part II - Specific Facility Terms and Conditions divided by A.III.8.a).

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #1 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #2 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - c. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - d. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum condition) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - e. a log of the downtime for the capture (collection) system, control devices, and monitoring equipment, when this emissions unit was in operation.

These quarterly summaries shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

3. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the VOC emissions exceeded 30.0 lbs/hr, and the actual average hourly VOC emissions for each such month.
4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii of this permit.

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V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for VOC (30.0 lbs/hr) and the overall control efficiency limitations for VOC (90% control and 70% overall).
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For VOC Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the overall efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
 - f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
5. Emission Limitation:
30.0 lbs/hr of VOC

Applicable Compliance Method:
Compliance with this emission limitation may be determined based upon the records required pursuant to section A.3.b of Part II - Specific Facility Terms and Conditions and section A.III.8 of the Terms and Conditions for this emissions unit. Compliance with this emission limitation shall be determined based upon the emission testing requirements specified in section A.V.1 of the Terms and Conditions for this emissions unit.
6. Emission Limitation:
25.0 tpy of VOC

Applicable Compliance Method:
Compliance with this emission limitation may be determined based upon the records required pursuant to Part II - Specific Facility Terms and Conditions section A.3.b of this permit.

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1677000105 Issuance type: Title V Proposed Permit

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Facility ID: 1677000105 Emissions Unit ID: K013 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
6-color flexographic printing press - W & H 4 - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2		See B.III.1 below.

2. Additional Terms and Conditions

- 1. None

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. The permit to install for this emissions unit (K013) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISC 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISC 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethyl alcohol

TLV (mg/m3): 1880
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 44761.9

Pollutant: ethyl acetate

TLV (mg/m3): 1440
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 34285.7

Pollutant: isopropyl alcohol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 23404.8

Pollutant: n-propyl acetate

TLV (mg/m3): 835

Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 19881.0

Pollutant: methyl ethyl ketone

TLV (mg/m3): 590

Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 14047.6

Pollutant: n-propyl alcohol

TLV (mg/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 11714.3

*The maximum hourly emission rate is the summation of the allowable mass emissions for K013 through K019 plus the 3.0 lbs/hr increase in the allowable for K008.

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:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
 If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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.

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677000105 Emissions Unit ID: K014 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
6-color flexographic printing press - PC 4 - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2	OAC rule 3745-31-05 (PTI 16-02024)	46.0 lbs/hr of volatile organic compounds (VOC) 25.0 tpy of VOC See A.I.2.a below. See A.I.2.b below.
	OAC rule 3745-21-09(Y)	

2. Additional Terms and Conditions

- a. The printing line shall be equipped with a capture system and associated control system which are designed and operated to achieve a control efficiency which is at least 90 percent, by weight, and an overall control efficiency which is at least 70 percent, by weight.
- b. The emission control requirements based on this applicable rule are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05.

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II. Operational Restrictions

1. The emissions from this emissions unit shall be vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2 when the emissions unit is in operation.
2. When thermal incinerator #1 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
3. When thermal incinerator #2 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
4. When catalytic incinerator #2 is in use, (a) the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance, and (b) the average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is operating at maximum conditions, shall not be less than 80 degrees Fahrenheit or shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2.
2. When thermal incinerator #1 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed,

calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

3. When thermal incinerator #2 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. When catalytic incinerator #2 is in use, the permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
5. The permittee shall collect and record the following information for each day when thermal incinerator #1 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
6. The permittee shall collect and record the following information for each day when thermal incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
7. The permittee shall collect and record the following information for each day when catalytic incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum conditions) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - c. a log of the downtime for the capture (collection) system, catalytic incinerator, and monitoring equipment, when this emissions unit was in operation.
8. The permittee shall collect and record the following information for each month for the emissions unit:
 - a. the total number of hours this emissions unit was in operation; and
 - b. the average, controlled VOC emission rate for this emissions unit, in pounds per hour (A.3.b.xxiv of Part II - Specific Facility Terms and Conditions divided by A.III.8.a).

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #1 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #2 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - c. all 3-hour blocks of time (when the emissions unit was in operation) during which the average

temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;

d. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum condition) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and

e. a log of the downtime for the capture (collection) system, control devices, and monitoring equipment, when this emissions unit was in operation.

These quarterly summaries shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

3. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the VOC emissions exceeded 46.0 lbs/hr, and the actual average hourly VOC emissions for each such month.
4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii of this permit.

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V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for VOC (46.0 lbs/hr) and the overall control efficiency limitations for VOC (90% control and 70% overall).
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For VOC Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the overall efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
 - f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
5. Emission Limitation:
46.0 lbs/hr of VOC

Applicable Compliance Method:
Compliance with this emission limitation may be determined based upon the records required pursuant to section A.3.b of Part II - Specific Facility Terms and Conditions and section A.III.8 of the Terms and Conditions for this emissions unit. Compliance with this emission limitation shall be determined based upon the emission testing requirements specified in section A.V.1 of the Terms and Conditions for this emissions unit.
6. Emission Limitation:
25.0 tpy of VOC

Applicable Compliance Method:
 Compliance with this emission limitation may be determined based upon the records required pursuant to Part II - Specific Facility Terms and Conditions section A.3.b of this permit.

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1677000105 Emissions Unit ID: K014 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
6-color flexographic printing press - PC 4 - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2		See B.III.1 below.
2. Additional Terms and Conditions		
1. None		

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II. **Operational Restrictions**

- 1. None

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

- 1. The permit to install for this emissions unit (K014) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISC 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISC 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethyl alcohol

TLV (mg/m3): 1880
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 44761.9

Pollutant: ethyl acetate

TLV (mg/m3): 1440

Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 34285.7

Pollutant: isopropyl alcohol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 23404.8

Pollutant: n-propyl acetate

TLV (mg/m3): 835
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 19881.0

Pollutant: methyl ethyl ketone

TLV (mg/m3): 590
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 14047.6

Pollutant: n-propyl alcohol

TLV (mg/m3): 492
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 11714.3

*The maximum hourly emission rate is the summation of the allowable mass emissions for K013 through K019 plus the 3.0 lbs/hr increase in the allowable for K008.

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 (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
 If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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.

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1677000105 Emissions Unit ID: K015 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
6-color flexographic printing press - W & H SOLO - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2	OAC rule 3745-31-05 (PTI 16-02024)	15.0 lbs/hr of volatile organic compounds (VOC)
		10.0 tpy of VOC
		See A.I.2.a below.
		See A.I.2.b below.
	OAC rule 3745-21-09(Y)	

2. **Additional Terms and Conditions**

- a. The printing line shall be equipped with a capture system and associated control system which are designed and operated to achieve a control efficiency which is at least 90 percent, by weight, and an overall control efficiency which is at least 70 percent, by weight.
- b. The emission control requirements based on this applicable rule are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05.

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II. **Operational Restrictions**

- 1. The emissions from this emissions unit shall be vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2 when the emissions unit is in operation.
- 2. When thermal incinerator #1 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
- 3. When thermal incinerator #2 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
- 4. When catalytic incinerator #2 is in use, (a) the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance, and (b) the average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is operating at maximum conditions, shall not be less than 80 degrees Fahrenheit or shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2.
2. When thermal incinerator #1 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
3. When thermal incinerator #2 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. When catalytic incinerator #2 is in use, the permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
5. The permittee shall collect and record the following information for each day when thermal incinerator #1 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
6. The permittee shall collect and record the following information for each day when thermal incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
7. The permittee shall collect and record the following information for each day when catalytic incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum conditions) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - c. a log of the downtime for the capture (collection) system, catalytic incinerator, and monitoring equipment, when this emissions unit was in operation.
8. The permittee shall collect and record the following information for each month for the emissions unit:
 - a. the total number of hours this emissions unit was in operation; and
 - b. the average, controlled VOC emission rate for this emissions unit, in pounds per hour (A.3.b.xxiv of Part II - Specific Facility Terms and Conditions divided by A.III.8.a).

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #1 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #2 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - c. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - d. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum condition) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - e. a log of the downtime for the capture (collection) system, control devices, and monitoring equipment, when this emissions unit was in operation.

These quarterly summaries shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
3. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the VOC emissions exceeded 15.0 lbs/hr, and the actual average hourly VOC emissions for each such month.
4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii of this permit.

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V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for VOC (15.0 lbs/hr) and the overall control efficiency limitations for VOC (90% control and 70% overall).
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For VOC Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the overall efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
 - f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or

local air agency.

- 5. Emission Limitation:
15.0 lbs/hr of VOC

Applicable Compliance Method:

Compliance with this emission limitation may be determined based upon the records required pursuant to section A.3.b of Part II - Specific Facility Terms and Conditions and section A.III.8 of the Terms and Conditions for this emissions unit. Compliance with this emission limitation shall be determined based upon the emission testing requirements specified in section A.V.1 of the Terms and Conditions for this emissions unit.

- 6. Emission Limitation:
10.0 tpy of VOC

Applicable Compliance Method:

Compliance with this emission limitation may be determined based upon the records required pursuant to Part II - Specific Facility Terms and Conditions section A.3.b of this permit.

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1677000105 Emissions Unit ID: K015 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
6-color flexographic printing press - W & H SOLO - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2		See B.III.1 below.

- 2. **Additional Terms and Conditions**

- 1. None

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II. **Operational Restrictions**

- 1. None

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

- 1. The permit to install for this emissions unit (K015) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISC 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISC 3.0 model was

compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethyl alcohol

TLV (mg/m3): 1880
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 44761.9

Pollutant: ethyl acetate

TLV (mg/m3): 1440
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 34285.7

Pollutant: isopropyl alcohol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 23404.8

Pollutant: n-propyl acetate

TLV (mg/m3): 835
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 19881.0

Pollutant: methyl ethyl ketone

TLV (mg/m3): 590
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 14047.6

Pollutant: n-propyl alcohol

TLV (mg/m3): 492
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 11714.3

*The maximum hourly emission rate is the summation of the allowable mass emissions for K013 through K019 plus the 3.0 lbs/hr increase in the allowable for K008.

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:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
 If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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.

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1677000105 Emissions Unit ID: K016 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. 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>
8-color flexographic printing press with outboard flexographic coater - PC VISION - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2	OAC rule 3745-31-05 (PTI 16-02024)	30.0 lbs/hr of volatile organic compounds (VOC)
		25.0 tpy of VOC
		See A.I.2.a below.
		See A.I.2.b below.
	OAC rule 3745-21-09(Y)	

2. Additional Terms and Conditions

- a. The printing line shall be equipped with a capture system and associated control system which are designed and operated to achieve a control efficiency which is at least 90 percent, by weight, and an overall control efficiency which is at least 70 percent, by weight, for VOC.
- b. The emission control requirements based on this applicable rule are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05.

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II. Operational Restrictions

1. The emissions from this emissions unit shall be vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2 when the emissions unit is in operation.
2. When thermal incinerator #1 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the

emissions unit(s) was (were) in compliance.

3. When thermal incinerator #2 is in use, the average combustion temperature within thermal incinerator, for any 3-hour block of time, shall not be less than 1300 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.
4. When catalytic incinerator #2 is in use, (a) the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit or shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance, and (b) the average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is operating at maximum conditions, shall not be less than 80 degrees Fahrenheit or shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2.
2. When thermal incinerator #1 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
3. When thermal incinerator #2 is in use, the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
4. When catalytic incinerator #2 is in use, the permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
5. The permittee shall collect and record the following information for each day when thermal incinerator #1 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
6. The permittee shall collect and record the following information for each day when thermal incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - b. a log of the downtime for the capture (collection) system, thermal incinerator, and monitoring equipment, when this emissions unit was in operation.
7. The permittee shall collect and record the following information for each day when catalytic incinerator #2 is in use:
 - a. all 3-hour blocks of time during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum conditions) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - c. a log of the downtime for the capture (collection) system, catalytic incinerator, and monitoring equipment, when this emissions unit was in operation.
8. The permittee shall collect and record the following information for each month for the emissions unit:

- a. the total number of hours this emissions unit was in operation; and
- b. the average, controlled VOC emission rate for this emissions unit, in pounds per hour (A.3.b.xxiv of Part II - Specific Facility Terms and Conditions divided by A.III.8.a).

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IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the emissions from the emissions unit were not vented to either thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #1 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - b. all 3-hour blocks of time during which the average combustion temperature within thermal incinerator #2 was less than 1300 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - c. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit or more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance;
 - d. all 3-hour blocks of time (when the emissions unit(s) was (were) operating at maximum condition) during which the average temperature difference across the catalyst bed was less than 80 degrees Fahrenheit or less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit(s) was (were) in compliance; and
 - e. a log of the downtime for the capture (collection) system, control devices, and monitoring equipment, when this emissions unit was in operation.

These quarterly summaries shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
3. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the VOC emissions exceeded 30.0 lbs/hr, and the actual average hourly VOC emissions for each such month.
4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii of this permit.

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V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for VOC (30.0 lbs/hr) and the overall control efficiency limitations for VOC (90% control and 70% overall).
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For VOC Methods 1-4 and 25 of 40 CFR Part 60, Appendix A. The test method(s) which must be employed to demonstrate compliance with the overall efficiency limitations for VOC are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
 - f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
4. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
5. Emission Limitation:
30.0 lbs/hr of VOC

Applicable Compliance Method:
Compliance with this emission limitation may be determined based upon the records required pursuant to section A.3.b of Part II - Specific Facility Terms and Conditions and section A.III.8 of the Terms and Conditions for this emissions unit. Compliance with this emission limitation shall be determined based upon the emission testing requirements specified in section A.V.1 of the Terms and Conditions for this emissions unit.
6. Emission Limitation:
25.0 tpy of VOC

Applicable Compliance Method
Compliance with this emission limitation may be determined based upon the records required pursuant to Part II - Specific Facility Terms and Conditions section A.3.b of this permit.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677000105 Issuance type: Title V Proposed Permit

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Facility ID: 1677000105 Emissions Unit ID: K016 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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	Applicable Emissions Limitations/Control Measures
8-color flexographic printing press with outboard flexographic coater - PC VISION - controlled with thermal incinerator #1, thermal incinerator #2, or catalytic incinerator #2		See B.III.1 below.

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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

1. The permit to install for this emissions unit (K016) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISC 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISC 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethyl alcohol

TLV (mg/m3): 1880
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 44761.9

Pollutant: ethyl acetate

TLV (mg/m3): 1440
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 34285.7

Pollutant: isopropyl alcohol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 23404.8

Pollutant: n-propyl acetate

TLV (mg/m3): 835
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 19881.0

Pollutant: methyl ethyl ketone

TLV (mg/m3): 590
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 14047.6

Pollutant: n-propyl alcohol

TLV (mg/m3): 492
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 11714.3

*The maximum hourly emission rate is the summation of the allowable mass emissions for K013 through K019 plus the 3.0 lbs/hr increase in the allowable for K008.

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:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust

flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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.

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1677000105 Emissions Unit ID: K017 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
9-color narrow flexographic printing press - COMCO 2	OAC rule 3745-31-05 (PTI 16-02024)	1.4 lbs/hr of volatile organic compounds (VOC) 1.0 tpy of VOC
	OAC rule 3745-21-09(Y)	See A.1.2.a below.

2. Additional Terms and Conditions

- a. The volatile organic compound content of the coatings and inks shall not exceed the following limitations:

- (a)

- a. 40 percent VOC, by volume, of the coating or ink, excluding water and exempt solvents; or
- b. 25 percent VOC, by volume, of the volatile matter in the coating or ink.

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating and ink, as applied; and
 - b. the VOC content in percentage VOC by volume of each coating and ink (excluding water and exempt solvents); or
 - c. the VOC content in percentage VOC by volume of the volatile matter in each coating and ink.

(This information does not have to be kept on a line-by-line basis, unless one or more of the lines is a new emissions unit and subject to specific "gallons/year" and "tons/year" limitations, or just a "tons/year" limitation in a Permit to Install. In such cases, for each such new emissions unit only, the above-mentioned information must be maintained separately for that line. Also, if the permittee mixes complying coatings at a line, it is not necessary to record the VOC content of the resulting mixture.)
2. The permittee shall maintain monthly records of the following information:
 - a. the linear feet of material produced by this emissions unit;
 - b. the total linear feet of material produced by all of the emissions units that do not employ control equipment;
 - c. the total number of hours this emissions unit was in operation;
 - d. the average, uncontrolled VOC emission rate for this emissions unit, in pounds per month (A.III.2.a divided by A.III.2.b and then multiplied by A.3.a.xiii of Part II - Specific Facility Terms and Conditions); and
 - e. the average, uncontrolled VOC emission rate for this emissions unit, in pounds per hour (A.III.2.d divided by A.III.2.c).

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IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings (for VOC content). The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the VOC emissions exceeded 1.4 lbs/hr, and the actual average hourly VOC emissions for each such month.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii of this permit.

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V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
40 percent VOC by volume of the coating and ink, excluding water and exempt solvents or 25 percent VOC by volume of the volatile matter in the coating and ink

Applicable Compliance Method:
OAC rule 3745-21-10(B). 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 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 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.

- b. Emission Limitation:
1.4 lbs/hr of VOC

Applicable Compliance Method:
Compliance may be demonstrated using the records required by section A.III.2 of these terms and conditions or, if required, compliance shall demonstrated through emission testing pursuant to OAC rule 3745-21-10(C).

- c. Emission Limitation:
1.0 tpy of VOC

Applicable Compliance Method:
Compliance with this emission limitation may be demonstrated through the records required pursuant to Part II - Specific Facility Terms and Conditions section A.3.a of this permit.

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1677000105 Emissions Unit ID: K017 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **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>
9-color narrow flexographic printing press - COMCO 2		See B.III.1 below.

- 2. **Additional Terms and Conditions**
 - 1. None

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II. **Operational Restrictions**

- 1. None

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

- 1. The permit to install for this emissions unit (K017) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISC 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISC 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethyl alcohol

TLV (mg/m3): 1880
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 44761.9

Pollutant: ethyl acetate

TLV (mg/m3): 1440
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 34285.7

Pollutant: isopropyl alcohol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 23404.8

Pollutant: n-propyl acetate

TLV (mg/m3): 835
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 19881.0

Pollutant: methyl ethyl ketone

TLV (mg/m3): 590
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 14047.6

Pollutant: n-propyl alcohol

TLV (mg/m3): 492
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level
 Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 11714.3

*The maximum hourly emission rate is the summation of the allowable mass emissions for K013 through K019 plus the 3.0 lbs/hr increase in the allowable for K008.

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:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
 If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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.

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1677000105 Emissions Unit ID: K018 Issuance type: Title V Proposed Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. 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>
9-color narrow flexographic printing press - COMCO 3	OAC rule 3745-31-05 (PTI 16-02024)	1.4 lbs/hr of volatile organic compounds (VOC) 1.0 tpy of VOC
	OAC rule 3745-21-09(Y)	See A.I.2.a below.

2. Additional Terms and Conditions

- a. The volatile organic compound content of the coatings and inks shall not exceed the following limitations:
 - (a)
 - a. 40 percent VOC, by volume, of the coating or ink, excluding water and exempt solvents; or
 - b. 25 percent VOC, by volume, of the volatile matter in the coating or ink.

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating and ink, as applied; and

- b. the VOC content in percentage VOC by volume of each coating and ink (excluding water and exempt solvents); or
- c. the VOC content in percentage VOC by volume of the volatile matter in each coating and ink.

(This information does not have to be kept on a line-by-line basis, unless one or more of the lines is a new emissions unit and subject to specific "gallons/year" and "tons/year" limitations, or just a "tons/year" limitation in a permit to install. In such cases, for each such new emissions unit only, the above-mentioned information must be maintained separately for that line. Also, if the permittee mixes complying coatings at a line, it is not necessary to record the VOC content of the resulting mixture.)

- 2. The permittee shall maintain monthly records of the following information:
 - a. the linear feet of material produced by this emissions unit;
 - b. the total linear feet of material produced by all of the emissions units that do not employ control equipment;
 - c. the total number of hours this emissions unit was in operation;
 - d. the average, uncontrolled VOC emission rate for this emissions unit, in pounds per month (A.III.2.a divided by A.III.2.b and then multiplied by A.3.a.xiii of Part II - Specific Facility Terms and Conditions); and
 - e. the average, uncontrolled VOC emission rate for this emissions unit, in pounds per hour (A.III.2.d divided by A.III.2.c).

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IV. Reporting Requirements

- 1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings (for VOC content). The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.
- 2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the VOC emissions exceeded 1.4 lbs/hr, and the actual average hourly VOC emissions for each such month.
- 3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii of this permit.

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V. Testing Requirements

- 1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
40 percent VOC by volume of the coating and ink, excluding water and exempt solvents or 25 percent VOC by volume of the volatile matter in the coating and ink

Applicable Compliance Method:
OAC rule 3745-21-10(B). 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 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 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.
 - b. Emission Limitation:
1.4 lbs/hr of VOC

Applicable Compliance Method:
Compliance may be demonstrated using the records required by section A.III.2 of these terms and conditions or, if required, compliance shall demonstrated through emission testing pursuant to OAC rule 3745-21-10(C).
 - c. Emission Limitation:
1.0 tpy of VOC

Applicable Compliance Method:
Compliance with this emission limitation may be demonstrated through the records required pursuant to Part II - Specific Facility Terms and Conditions section A.3.a of this permit.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677000105 Emissions Unit ID: K018 Issuance type: Title V Proposed Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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>
9-color narrow flexographic printing press - COMCO 3		See B.III.1 below.

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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

1. The permit to install for this emissions unit (K018) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the ISC 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the ISC 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethyl alcohol

TLV (mg/m3): 1880
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 44761.9

Pollutant: ethyl acetate

TLV (mg/m3): 1440
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 7455.72
 MAGLC (ug/m3): 34285.7

Pollutant: isopropyl alcohol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 128.2*
 Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 7455.72
MAGLC (ug/m3): 23404.8

Pollutant: n-propyl acetate

TLV (mg/m3): 835
Maximum Hourly Emission Rate (lbs/hr): 128.2*
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 7455.72
MAGLC (ug/m3): 19881.0

Pollutant: methyl ethyl ketone

TLV (mg/m3): 590
Maximum Hourly Emission Rate (lbs/hr): 128.2*
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 7455.72
MAGLC (ug/m3): 14047.6

Pollutant: n-propyl alcohol

TLV (mg/m3): 492
Maximum Hourly Emission Rate (lbs/hr): 128.2*
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 7455.72
MAGLC (ug/m3): 11714.3

*The maximum hourly emission rate is the summation of the allowable mass emissions for K013 through K019 plus the 3.0 lbs/hr increase in the allowable for K008.

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 (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

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.

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None