

Facility ID: 1677130067 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

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

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

- [Go to Part II for Emissions Unit K001](#)
- [Go to Part II for Emissions Unit K002](#)
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Facility ID: 1677130067 Emissions Unit ID: K001 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Flexographic printing press - 4-C Robinette RB-4 (K001)	OAC rule 3745-31-05 (PTI 16-1655)	5.9 lbs/hr of volatile organic compound (VOC)
		1.2 lbs/hr of ammonia
		See A.2.a, A.2.b, and A.2.c below.
	OAC rule 3745-21-09(Y)	See A.2.d below.

2. Additional Terms and Conditions

- (a) Mid-America Packaging has requested to restrict the emissions of any individual hazardous air pollutant (HAP) to 8.0 tons per rolling, 12-month period, the emissions of the total combined HAPs to 20.0 tons per rolling, 12-month period, and the emissions of the VOC and organic compound (OC) to 95.6 tons per rolling, 12-month period. The company proposed these emission limits to avoid Title V permitting and the Printing and Publishing MACT, 40 CFR Part 63, subpart KK. Mid-America Packaging has accepted these federally enforceable emission limits as a facility-wide cap on emissions from units K001, K002, K004, K009, K010, P001, and P002. To ensure enforceability during the first 12 calendar months of operation following the issuance of the PTI, the permittee shall not exceed these facility-wide emission levels specified in the following table:

Month(s)	VOC	OC	individual HAP	total combined HAPs
1	8.0 tons	0.7 tons	1.7 tons	
1-2	15.9 tons	1.3 tons	3.3 tons	
1-3	23.9 tons	2.0 tons	5.0 tons	
1-4	31.9 tons	2.7 tons	6.7 tons	
1-5	39.8 tons	3.3 tons	8.3 tons	
1-6	47.8 tons	4.0 tons	10.0 tons	
1-7	55.8 tons	4.7 tons	11.7 tons	
1-8	63.7 tons	5.3 tons	13.3 tons	
1-9	71.7 tons	6.0 tons	15.0 tons	
1-10	79.7 tons	6.7 tons	16.7 tons	
1-11	87.6 tons	7.3 tons	18.3 tons	
1-12	95.6 tons	8.0 tons	20.0 tons	

After the first 12 calendar months of operation following the issuance of the PTI, compliance with the

annual emission limitation for VOC and OC, individual HAP, and total combined HAPs shall be based upon a rolling, 12-month summation of the monthly emissions.

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

- a. forty per cent VOC by volume of the coating and ink, excluding water; or
- b. twenty-five per cent VOC by volume of the volatile matter in the coating and ink.

B. Operational Restrictions

- 1. Mid-America Packaging shall not operate emissions unit K003, K005, K006, K007, and K008.

C. Monitoring and/or Record Keeping Requirements

- 1. In order to determine compliance with the facility-wide emission limitations, the permittee shall maintain monthly records of the following information for the entire facility which consists of emission units K001, K002, K004, K009, K010, P001, and P002:

- a. the name and identification of each coating and ink, as applied;
- b. the VOC or OC content of each coating and ink, as applied, in pounds per gallon. This should include any thinning solvents added to the coatings at the facility;
- c. the individual HAP content for each HAP of each coating or ink in pounds of individual HAP per gallon of coating or ink, as applied;
- d. the total combined HAP content of each coating or ink in pounds of combined HAPs per gallon of coating or ink, as applied (sum all the individual HAP contents from c);
- e. the number of gallons of each coating and ink employed;
- f. the name and identification of each cleanup material employed;
- g. the VOC or OC content of each cleanup material, in pounds per gallon;
- h. the individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied;
- i. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from h);
- j. the number of gallons of each cleanup material employed;
- k. the total individual HAP emissions for the entire facility for each HAP from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (for each HAP the sum of c times e for each coating and ink and the sum of h times j for each cleanup material);
- l. the total combined HAPs emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of d times e for each coating and ink and the sum of i times j for each cleanup material);
- m. the total VOC and OC emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of b times e for each coating and ink and the sum of g times j for each cleanup material); and
- n. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for the entire facility for each calendar month.

- 2. The permittee shall collect and record the following information each month for the line:

- a. the name and identification number of each coating, as applied; and
- b. the VOC content in percentage VOC by volume of the coating and ink (excluding water); or
- c. the VOC content in percentage VOC by volume of the volatile matter in the 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.)

- 3. The permittee shall collect and record the following information each day for each line when a noncomplying coating is used:

- a. the name and identification number of each coating, as applied;
- b. the VOC content in percentage VOC by volume of the coating and ink (excluding water) or the VOC content in percentage VOC by volume of the volatile matter in the coating and ink and the number of gallons of each coating, as applied; and
- c. the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,5 or CVOC,6.

D. Reporting Requirements

- 1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month

emission limitation for VOC and OC, individual HAP, and total combined HAPs and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition 3.

2. 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 and OC, individual HAP, and total combined HAPs for each month during the calendar year (January through December); and
 - b. for the entire facility, the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for each month for the first 12 calendar months of operation following the issuance of this permit.
3. 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 unless the daily record shows that the daily volume-weighted average VOC content of all coatings employed on that day does not exceed the applicable limitation. 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 45 days after the exceedance occurs.
4. The permittee shall submit an initial notification as required in 40 CFR 63, Subpart KK.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1. and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

8.0 tons of any individual HAP per rolling, 12-month period
 20.0 tons of total combined HAPs per rolling, 12-month period
 95.6 tons of VOC and OC per rolling, 12-month period

Applicable Compliance Method:

Monthly record keeping of the usage, the VOC or OC content, and the HAP content of each coating, ink, and cleanup material as required by Section C.1 of these terms and conditions. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings, inks, and cleanup materials. Formulation data shall be used to determine the HAP contents of the coatings, inks, and cleanup materials.

Emission Limitation:

forty per cent VOC by volume of the coating and ink, excluding water or twenty-five per cent 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.

Emission Limitation:

5.9 lbs/hr of VOC

Applicable Compliance Method:

Multiply the worst-case ink formulation for VOC by the maximum gallons of ink per hour. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the inks.

Emission Limitation:

1.2 lbs/hr of ammonia

Applicable Compliance Method:

Multiply the worst-case ink formulation for ammonia by the maximum gallons of ink per hour. Formulation data shall be used to determine the ammonia contents of the inks.

F. Miscellaneous Requirements

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 16-1655. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the VOC and Ammonia emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen 3.0 model and a comparison of the predicted 1 hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Ammonia

TLV (mg/m3): 17
 Maximum Hourly Emission Rate (lbs/hr): 3.03*
 Predicted 1 Hour Maximum Ground-Level Concentration (MGLC) (ug/m3): 184.1
 MAGLC (ug/m3): 404.76

Pollutant: Acetone

TLV (mg/m3): 1780
Maximum Hourly Emission Rate (lbs/hr): 29.3*
Predicted 1 Hour MGLC (ug/m3): 1325.4
MAGLC (ug/m3): 42380.95

Pollutant: 2-Butoxyethanol

TLV (mg/m3): 121
Maximum Hourly Emission Rate (lbs/hr): 29.3**
Predicted 1 Hour MGLC (ug/m3): 1352.4
MAGLC (ug/m3): 2880.95

Pollutant: Dipropylene Glycol Monomethyl Ether

TLV (mg/m3): 606
Maximum Hourly Emission Rate (lbs/hr): 29.3**
Predicted 1 Hour MGLC (ug/m3): 1325.4
MAGLC (ug/m3): 14428.57

Pollutant: Ethylene Glycol

TLV (mg/m3): 80
Maximum Hourly Emission Rate (lbs/hr): 29.3**
Predicted 1 Hour MGLC (ug/m3): 1325.4
MAGLC (ug/m3): 1904.76

Pollutant: Isopropanol

TLV (mg/m3): 983
Maximum Hourly Emission Rate (lbs/hr): 29.3**
Predicted 1 Hour MGLC (ug/m3): 1325.4
MAGLC (ug/m3): 23404.76
Pollutant: N-propyl alcohol

TLV (mg/m3): 492
Maximum Hourly Emission Rate (lbs/hr): 29.3**
Predicted 1 Hour MGLC (ug/m3): 1325.4
MAGLC (ug/m3): 11714.29

Pollutant: Styrene

TLV (mg/m3): 213
Maximum Hourly Emission Rate (lbs/hr): 29.3**
Predicted 1 Hour MGLC (ug/m3): 1325.4
MAGLC (ug/m3): 5071.43

*3.03 lbs/hr is the total combined mass emissions allowable for ammonia for K001, K002, and K004.

**29.3 lbs/hr is the total combined mass emissions allowable for VOC for K001, K002, K004, and P001.

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI number 16-1655 and the operating permit:

- a. Any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup 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 specified in the above table.
- b. Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table.
- c. Any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.
- d. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)].
- e. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" as defined in OAC rule 3745-77-01(V).

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Facility ID: 1677130067 Emissions Unit ID: K002 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Flexographic printing press - Stellaflex SF 6-1 (K002)	OAC rule 3745-31-05 (PTI 16-1655)	10.3 lbs/hr of volatile organic compound (VOC) 0.9 lb/hr of ammonia See A.2.a, A.2.b, and A.2.c below. See A.2.d below.
	OAC rule 3745-21-09(Y)	

2. Additional Terms and Conditions

- (a) Mid-America Packaging has requested to restrict the emissions of any individual hazardous air pollutant (HAP) to 8.0 tons per rolling, 12-month period, the emissions of the total combined HAPs to 20.0 tons per rolling, 12-month period, and the emissions of the VOC and organic compound (OC) to 95.6 tons per rolling, 12-month period. The company proposed these emission limits to avoid Title V permitting and the Printing and Publishing MACT, 40 CFR Part 63, subpart KK. Mid-America Packaging has accepted these federally enforceable emission limits as a facility-wide cap on emissions from units K001, K002, K004, K009, K010, P001, and P002. To ensure enforceability during the first 12 calendar months of operation following the issuance of the PTI, the permittee shall not exceed these facility-wide emission levels specified in the following table:

	. Maximum	Allowable	Cumulative	Emissions of
Month(s)	VOC	and OC	individual HAP	total combined HAPs
1	8.0 tons	0.7 tons	1.7 tons	
1-2	15.9 tons	1.3 tons	3.3 tons	
1-3	23.9 tons	2.0 tons	5.0 tons	
1-4	31.9 tons	2.7 tons	6.7 tons	
1-5	39.8 tons	3.3 tons	8.3 tons	
1-6	47.8 tons	4.0 tons	10.0 tons	
1-7	55.8 tons	4.7 tons	11.7 tons	
1-8	63.7 tons	5.3 tons	13.3 tons	
1-9	71.7 tons	6.0 tons	15.0 tons	
1-10	79.7 tons	6.7 tons	16.7 tons	
1-11	87.6 tons	7.3 tons	18.3 tons	
1-12	95.6 tons	8.0 tons	20.0 tons	

After the first 12 calendar months of operation following the issuance of the PTI, compliance with the annual emission limitation for VOC and OC, individual HAP, and total combined HAPs shall be based upon a rolling, 12-month summation of the monthly emissions. The volatile organic compound content of the coatings and inks employed shall not exceed the following limitations:

- a. forty per cent VOC by volume of the coating and ink, excluding water; or
- b. twenty-five per cent VOC by volume of the volatile matter in the coating and ink.

B. Operational Restrictions

1. Mid-America Packaging shall not operate emissions unit K003, K005, K006, K007, and K008.

C. Monitoring and/or Record Keeping Requirements

1. In order to determine compliance with the facility-wide emission limitations, the permittee shall maintain monthly records of the following information for the entire facility which consists of emission units K001, K002, K004, K009, K010, P001, and P002:
 - a. the name and identification of each coating and ink, as applied;
 - b. the VOC or OC content of each coating and ink, as applied, in pounds per gallon. This should include any thinning solvents added to the coatings at the facility;

- c. the individual HAP content for each HAP of each coating or ink in pounds of individual HAP per gallon of coating or ink, as applied;
 - d. the total combined HAP content of each coating or ink in pounds of combined HAPs per gallon of coating or ink, as applied (sum all the individual HAP contents from c);
 - e. the number of gallons of each coating and ink employed;
 - f. the name and identification of each cleanup material employed;
 - g. the VOC or OC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from h);
 - j. the number of gallons of each cleanup material employed;
 - k. the total individual HAP emissions for the entire facility for each HAP from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (for each HAP the sum of c times e for each coating and ink and the sum of h times j for each cleanup material);
 - l. the total combined HAPs emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of d times e for each coating and ink and the sum of i times j for each cleanup material);
 - m. the total VOC and OC emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of b times e for each coating and ink and the sum of g times j for each cleanup material); and
 - n. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for the entire facility for each calendar month.
2. The permittee shall collect and record the following information each month for the line:
- a. the name and identification number of each coating, as applied; and
 - b. the VOC content in percentage VOC by volume of the coating and ink (excluding water); or
 - c. the VOC content in percentage VOC by volume of the volatile matter in the 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.)
3. The permittee shall collect and record the following information each day for each line when a noncomplying coating is used:
- a. the name and identification number of each coating, as applied;
 - b. the VOC content in percentage VOC by volume of the coating and ink (excluding water) or the VOC content in percentage VOC by volume of the volatile matter in the coating and ink and the number of gallons of each coating, as applied; and
 - c. the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,5 or CVOC,6.
- D. Reporting Requirements**
- 1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for VOC and OC, individual HAP, and total combined HAPs and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition 3.
 - 2. 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 and OC, individual HAP, and total combined HAPs for each month during the calendar year (January through December); and
 - b. for the entire facility, the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for each month for the first 12 calendar months of operation following the issuance of this permit.
 - 3. 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 unless the daily record shows that the daily volume-weighted average VOC content of all coatings employed on that day does not exceed the applicable limitation. 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 45 days after the exceedance occurs.
 - 4. The permittee shall submit an initial notification as required in 40 CFR 63, Subpart KK.
- E. Testing Requirements**

1. Compliance with the emission limitations in Sections A.1. and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

8.0 tons of any individual HAP per rolling, 12-month period
 20.0 tons of total combined HAPs per rolling, 12-month period
 95.6 tons of VOC and OC per rolling, 12-month period

Applicable Compliance Method:

Monthly record keeping of the usage, the VOC or OC content, and the HAP content of each coating, ink, and cleanup material as required by Section C.1 of these terms and conditions. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings, inks, and cleanup materials. Formulation data shall be used to determine the HAP contents of the coatings, inks, and cleanup materials.

Emission Limitation:

forty per cent VOC by volume of the coating and ink, excluding water or twenty-five per cent 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.

Emission Limitation:

10.3 lbs/hr of VOC

Applicable Compliance Method:

Multiply the worst-case ink formulation for VOC by the maximum gallons of ink per hour plus the worst-case laquer formulation for VOC by the maximum gallons of laquer per hour. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings and inks.

Emission Limitation:

0.9 lb/hr of ammonia

Applicable Compliance Method:

Multiply the worst-case ink formulation for ammonia by the maximum gallons of ink per hour. Formulation data shall be used to determine the ammonia contents of the inks.

F. Miscellaneous Requirements

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 16-1655. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the VOC and Ammonia emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen 3.0 model and a comparison of the predicted 1 hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Ammonia

TLV (mg/m3): 17

Maximum Hourly Emission Rate (lbs/hr): 3.03*

Predicted 1 Hour Maximum Ground-Level Concentration (MGLC) (ug/m3): 184.1

MAGLC (ug/m3): 404.76

Pollutant: Acetone

TLV (mg/m3): 1780

Maximum Hourly Emission Rate (lbs/hr): 29.3*

Predicted 1 Hour MGLC (ug/m3): 1325.4

MAGLC (ug/m3): 42380.95

Pollutant: 2-Butoxyethanol

TLV (mg/m3): 121

Maximum Hourly Emission Rate (lbs/hr): 29.3**

Predicted 1 Hour MGLC (ug/m3): 1352.4

MAGLC (ug/m3): 2880.95

Pollutant: Dipropylene Glycol Monomethyl Ether

TLV (mg/m3): 606

Maximum Hourly Emission Rate (lbs/hr): 29.3**

Predicted 1 Hour MGLC (ug/m3): 1325.4

MAGLC (ug/m3): 14428.57

Pollutant: Ethylene Glycol

TLV (mg/m3): 80
 Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 1904.76

Pollutant: Isopropanol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 23404.76
 Pollutant: N-propyl alcohol

TLV (mg/m3): 492
 Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 11714.29

Pollutant: Styrene

TLV (mg/m3): 213
 Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 5071.43

*3.03 lbs/hr is the total combined mass emissions allowable for ammonia for K001, K002, and K004.

**29.3 lbs/hr is the total combined mass emissions allowable for VOC for K001, K002, K004, and P001.

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI number 16-1655 and the operating permit:

- a. Any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup 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 specified in the above table.
- b. Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table.
- c. Any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.
- d. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)].
- e. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" as defined in OAC rule 3745-77-01(V).

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

Facility ID: 1677130067 Emissions Unit ID: K004 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Flexographic printing press - Robinette RB-6 (K004)	OAC rule 3745-31-05 (PTI 16-1655)	5.1 lbs/hr of volatile organic compound (VOC)

0.93 lb/hr of ammonia

See A.2.a, A.2.b, and A.2.c below.

See A.2.d below.

OAC rule 3745-21-09(Y)

2. Additional Terms and Conditions

- (a) Mid-America Packaging has requested to restrict the emissions of any individual hazardous air pollutant (HAP) to 8.0 tons per rolling, 12-month period, the emissions of the total combined HAPs to 20.0 tons per rolling, 12-month period, and the emissions of the VOC and organic compound (OC) to 95.6 tons per rolling, 12-month period. The company proposed these emission limits to avoid Title V permitting and the Printing and Publishing MACT, 40 CFR Part 63, subpart KK. Mid-America Packaging has accepted these federally enforceable emission limits as a facility-wide cap on emissions from units K001, K002, K004, K009, K010, P001, and P002. To ensure enforceability during the first 12 calendar months of operation following the issuance of the PTI, the permittee shall not exceed these facility-wide emission levels specified in the following table:

	Maximum	Allowable	Cumulative
Emissions of Month(s)	VOC	OC	individual HAP total combined HAPs
1	8.0 tons	0.7 tons	1.7 tons
1-2	15.9 tons	1.3 tons	3.3 tons
1-3	23.9 tons	2.0 tons	5.0 tons
1-4	31.9 tons	2.7 tons	6.7 tons
1-5	39.8 tons	3.3 tons	8.3 tons
1-6	47.8 tons	4.0 tons	10.0 tons
1-7	55.8 tons	4.7 tons	11.7 tons
1-8	63.7 tons	5.3 tons	13.3 tons
1-9	71.7 tons	6.0 tons	15.0 tons
1-10	79.7 tons	6.7 tons	16.7 tons
1-11	87.6 tons	7.3 tons	18.3 tons
1-12	95.6 tons	8.0 tons	20.0 tons

After the first 12 calendar months of operation following the issuance of the PTI, compliance with the annual emission limitation for VOC and OC, individual HAP, and total combined HAPs shall be based upon a rolling, 12-month summation of the monthly emissions. The volatile organic compound content of the coatings and inks employed shall not exceed the following limitations:

- a. forty per cent VOC by volume of the coating and ink, excluding water; or
- b. twenty-five per cent VOC by volume of the volatile matter in the coating and ink.

B. Operational Restrictions

- 1. Mid-America Packaging shall not operate emissions unit K003, K005, K006, K007, and K008.

C. Monitoring and/or Record Keeping Requirements

- 1. In order to determine compliance with the facility-wide emission limitations, the permittee shall maintain monthly records of the following information for the entire facility which consists of emission units K001, K002, K004, K009, K010, P001, and P002:
 - a. the name and identification of each coating and ink, as applied;
 - b. the VOC or OC content of each coating and ink, as applied, in pounds per gallon. This should include any thinning solvents added to the coatings at the facility;
 - c. the individual HAP content for each HAP of each coating or ink in pounds of individual HAP per gallon of coating or ink, as applied;
 - d. the total combined HAP content of each coating or ink in pounds of combined HAPs per gallon of coating or ink, as applied (sum all the individual HAP contents from c);
 - e. the number of gallons of each coating and ink employed;
 - f. the name and identification of each cleanup material employed;
 - g. the VOC or OC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from h);
 - j. the number of gallons of each cleanup material employed;
 - k. the total individual HAP emissions for the entire facility for each HAP from all the coatings and inks and

- cleanup materials employed, in tons per month and tons per rolling, 12-month period (for each HAP the sum of c times e for each coating and ink and the sum of h times j for each cleanup material);
- l. the total combined HAPs emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of d times e for each coating and ink and the sum of i times j for each cleanup material);
- m. the total VOC and OC emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of b times e for each coating and ink and the sum of g times j for each cleanup material); and
- n. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for the entire facility for each calendar month.

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

- a. the name and identification number of each coating, as applied; and
- b. the VOC content in percentage VOC by volume of the coating and ink (excluding water), or
- c. the VOC content in percentage VOC by volume of the volatile matter in the 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.)

3. The permittee shall collect and record the following information each day for each line when a noncomplying coating is used:

- a. the name and identification number of each coating, as applied;
- b. the VOC content in percentage VOC by volume of the coating and ink (excluding water) or the VOC content in percentage VOC by volume of the volatile matter in the coating and ink and the number of gallons of each coating, as applied; and
- c. the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,5 or CVOC,6.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for VOC and OC, individual HAP, and total combined HAPs and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition 3.
2. 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 and OC, individual HAP, and total combined HAPs for each month during the calendar year (January through December); and
- b. for the entire facility, the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for each month for the first 12 calendar months of operation following the issuance of this permit.
3. 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 unless the daily record shows that the daily volume-weighted average VOC content of all coatings employed on that day does not exceed the applicable limitation. 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 45 days after the exceedance occurs.
4. The permittee shall submit an initial notification as required in 40 CFR 63, Subpart KK.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1. and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

8.0 tons of any individual HAP per rolling, 12-month period
 20.0 tons of total combined HAPs per rolling, 12-month period
 95.6 tons of VOC and OC per rolling, 12-month period

Applicable Compliance Method:

Monthly record keeping of the usage, the VOC or OC content, and the HAP content of each coating, ink, and cleanup material as required by Section C.1 of these terms and conditions. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings, inks, and cleanup materials. Formulation data shall be used to determine the HAP contents of the coatings, inks, and cleanup materials.

Emission Limitation:

forty per cent VOC by volume of the coating and ink, excluding water or twenty-five per cent 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.

Emission Limitation:

5.1 lbs/hr of VOC

Applicable Compliance Method:

Multiply the worst-case ink formulation for VOC by the maximum gallons of ink per hour plus the worst-case laquer formulation for VOC by the maximum gallons of laquer per hour. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings and inks.

Emission Limitation:

0.93 lb/hr of ammonia

Applicable Compliance Method:

Multiply the worst-case ink formulation for ammonia by the maximum gallons of ink per hour. Formulation data shall be used to determine the ammonia contents of the inks.

F. Miscellaneous Requirements

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 16-1655. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the VOC and Ammonia emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen 3.0 model and a comparison of the predicted 1 hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Ammonia

TLV (mg/m3): 17

Maximum Hourly Emission Rate (lbs/hr): 3.03*

Predicted 1 Hour Maximum Ground-Level Concentration (MGLC) (ug/m3): 184.1

MAGLC (ug/m3): 404.76

Pollutant: Acetone

TLV (mg/m3): 1780

Maximum Hourly Emission Rate (lbs/hr): 29.3*

Predicted 1 Hour MGLC (ug/m3): 1325.4

MAGLC (ug/m3): 42380.95

Pollutant: 2-Butoxyethanol

TLV (mg/m3): 121

Maximum Hourly Emission Rate (lbs/hr): 29.3**

Predicted 1 Hour MGLC (ug/m3): 1352.4

MAGLC (ug/m3): 2880.95

Pollutant: Dipropylene Glycol Monomethyl Ether

TLV (mg/m3): 606

Maximum Hourly Emission Rate (lbs/hr): 29.3**

Predicted 1 Hour MGLC (ug/m3): 1325.4

MAGLC (ug/m3): 14428.57

Pollutant: Ethylene Glycol

TLV (mg/m3): 80

Maximum Hourly Emission Rate (lbs/hr): 29.3**

Predicted 1 Hour MGLC (ug/m3): 1325.4

MAGLC (ug/m3): 1904.76

Pollutant: Isopropanol

TLV (mg/m3): 983

Maximum Hourly Emission Rate (lbs/hr): 29.3**

Predicted 1 Hour MGLC (ug/m3): 1325.4

MAGLC (ug/m3): 23404.76

Pollutant: N-propyl alcohol

TLV (mg/m3): 492

Maximum Hourly Emission Rate (lbs/hr): 29.3**

Predicted 1 Hour MGLC (ug/m3): 1325.4

MAGLC (ug/m3): 11714.29

Pollutant: Styrene

TLV (mg/m3): 213

Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 5071.43

*3.03 lbs/hr is the total combined mass emissions allowable for ammonia for K001, K002, and K004.

**29.3 lbs/hr is the total combined mass emissions allowable for VOC for K001, K002, K004, and P001.

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI number 16-1655 and the operating permit:

- a. Any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup 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 specified in the above table.
- b. Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table.
- c. Any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.
- d. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)].
- e. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" as defined in OAC rule 3745-77-01(V).

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

Facility ID: 1677130067 Emissions Unit ID: K009 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Flexographic printing press - 4-C Robinette (K009)	OAC rule 3745-31-05 (PTI 16-1656)	5.9 lbs/hr of volatile organic compound (VOC) 1.2 lbs/hr of ammonia See A.2.a, A.2.b, and A.2.c below. See A.2.d below.
	OAC rule 3745-21-09(Y)	

2. Additional Terms and Conditions

- (a) Mid-America Packaging has requested to restrict the emissions of any individual hazardous air pollutant (HAP) to 8.0 tons per rolling, 12-month period, the emissions of the total combined HAPs to 20.0 tons per rolling, 12-month period, and the emissions of the VOC and organic compound (OC) to 95.6 tons per rolling, 12-month period. The company proposed these emission limits to avoid Title V permitting and the Printing and Publishing MACT, 40 CFR Part 63, subpart KK. Mid-America Packaging has accepted these federally enforceable emission limits as a facility-wide cap on emissions from units K001, K002, K004, K009, K010, P001, and P002. To ensure enforceability during the first 12 calendar months of operation following the issuance of the

PTI, the permittee shall not exceed these facility-wide emission levels specified in the following table:

	Maximum	Maximum	Maximum
	Allowable	Allowable	Allowable
	Cumulative	Cumulative	Cumulative
	Emissions of	Emissions of	Emissions of
Month(s)	VOC	and OC	individual HAP total combined HAPs
1	8.0 tons	0.7 tons	1.7 tons
1-2	15.9 tons	1.3 tons	3.3 tons
1-3	23.9 tons	2.0 tons	5.0 tons
1-4	31.9 tons	2.7 tons	6.7 tons
1-5	39.8 tons	3.3 tons	8.3 tons
1-6	47.8 tons	4.0 tons	10.0 tons
1-7	55.8 tons	4.7 tons	11.7 tons
1-8	63.7 tons	5.3 tons	13.3 tons
1-9	71.7 tons	6.0 tons	15.0 tons
1-10	79.7 tons	6.7 tons	16.7 tons
1-11	87.6 tons	7.3 tons	18.3 tons
1-12	95.6 tons	8.0 tons	20.0 tons

After the first 12 calendar months of operation following the issuance of the PTI, compliance with the annual emission limitation for VOC and OC, individual HAP, and total combined HAPs shall be based upon a rolling, 12-month summation of the monthly emissions. The volatile organic compound content of the coatings and inks employed shall not exceed the following limitations:

- a. forty per cent VOC by volume of the coating and ink, excluding water; or
- b. twenty-five per cent VOC by volume of the volatile matter in the coating and ink.

B. Operational Restrictions

- 1. Mid-America Packaging shall not operate emissions unit K003, K005, K006, K007, and K008.

C. Monitoring and/or Record Keeping Requirements

- 1. In order to determine compliance with the facility-wide emission limitations, the permittee shall maintain monthly records of the following information for the entire facility which consists of emission units K001, K002, K004, K009, K010, P001, and P002:
 - a. the name and identification of each coating and ink, as applied;
 - b. the VOC or OC content of each coating and ink, as applied, in pounds per gallon. This should include any thinning solvents added to the coatings at the facility;
 - c. the individual HAP content for each HAP of each coating or ink in pounds of individual HAP per gallon of coating or ink, as applied;
 - d. the total combined HAP content of each coating or ink in pounds of combined HAPs per gallon of coating or ink, as applied (sum all the individual HAP contents from c);
 - e. the number of gallons of each coating and ink employed;
 - f. the name and identification of each cleanup material employed;
 - g. the VOC or OC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from h);
 - j. the number of gallons of each cleanup material employed;
 - k. the total individual HAP emissions for the entire facility for each HAP from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (for each HAP the sum of c times e for each coating and ink and the sum of h times j for each cleanup material);
 - l. the total combined HAPs emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of d times e for each coating and ink and the sum of i times j for each cleanup material);
 - m. the total VOC and OC emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of b times e for each coating and ink and the sum of g times j for each cleanup material); and
 - n. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for the entire facility for each calendar month.
- 2. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating, as applied; and
 - b. the VOC content in percentage VOC by volume of the coating and ink (excluding water); or
 - c. the VOC content in percentage VOC by volume of the volatile matter in the 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.)

3. The permittee shall collect and record the following information each day for each line when a noncomplying coating is used:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content in percentage VOC by volume of the coating and ink (excluding water) or the VOC content in percentage VOC by volume of the volatile matter in the coating and ink and the number of gallons of each coating, as applied; and
 - c. the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,5 or CVOC,6.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for VOC and OC, individual HAP, and total combined HAPs and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition 3.
2. 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 and OC, individual HAP, and total combined HAPs for each month during the calendar year (January through December); and
 - b. for the entire facility, the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for each month for the first 12 calendar months of operation following the issuance of this permit.
3. 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 unless the daily record shows that the daily volume-weighted average VOC content of all coatings employed on that day does not exceed the applicable limitation. 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 45 days after the exceedance occurs.
4. The permittee shall submit an initial notification as required in 40 CFR 63, Subpart KK.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1. and A.2 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:
8.0 tons of any individual HAP per rolling, 12-month period
20.0 tons of total combined HAPs per rolling, 12-month period
95.6 tons of VOC and OC per rolling, 12-month period
Applicable Compliance Method:
Monthly record keeping of the usage, the VOC or OC content, and the HAP content of each coating, ink, and cleanup material as required by Section C.1 of these terms and conditions. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings, inks, and cleanup materials. Formulation data shall be used to determine the HAP contents of the coatings, inks, and cleanup materials.
Emission Limitation:
forty per cent VOC by volume of the coating and ink, excluding water or twenty-five per cent 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.
Emission Limitation:
5.9 lbs/hr of VOC
Applicable Compliance Method:
Multiply the worst-case ink formulation for VOC by the maximum gallons of ink per hour. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the inks.
Emission Limitation:
1.2 lbs/hr of ammonia
Applicable Compliance Method:

Multiply the worst-case ink formulation for ammonia by the maximum gallons of ink per hour. Formulation data shall be used to determine the ammonia contents of the inks.

F. Miscellaneous Requirements

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 16-1656. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the VOC and Ammonia emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen 3.0 model and a comparison of the predicted 1 hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Ammonia

TLV (mg/m3): 17
 Maximum Hourly Emission Rate (lbs/hr): 1.7*
 Predicted 1 Hour Maximum Ground-Level Concentration (MGLC) (ug/m3): 181.97
 MAGLC (ug/m3): 404.76

Pollutant: 2-Butoxyethanol

TLV (mg/m3): 121
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 2880.95

Pollutant: Dipropylene Glycol Monomethyl Ether

TLV (mg/m3): 606
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 14428.57

Pollutant: Ethylene Glycol

TLV (mg/m3): 80
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 1904.76

Pollutant: Isopropanol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 23404.76

Pollutant: N-propyl alcohol

TLV (mg/m3): 492
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 11714.29
 Pollutant: Styrene

TLV (mg/m3): 213
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 5071.43

*1.7 lbs/hr is the total combined mass emissions allowable for ammonia for K009 and K010

**8.4 lbs/hr is the total combined mass emissions allowable for VOC for K009 and K010

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI number 16-1656 and the operating permit:

- a. Any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup 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 specified in the above table.
- b. Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table.
- c. Any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.
- d. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)].
- e. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup

materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" as defined in OAC rule 3745-77-01(V).

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Facility ID: 1677130067 Emissions Unit ID: K010 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Flexographic printing press - In-Line Printer (K010)	OAC rule 3745-31-05 (PTI 16-1656)	2.5 lbs/hr of volatile organic compound (VOC)
		0.5 lb/hr of ammonia
		See A.2.a, A.2.b, and A.2.c below.
		See A.2.d below.
	OAC rule 3745-21-09(Y)	

2. Additional Terms and Conditions

- (a) Mid-America Packaging has requested to restrict the emissions of any individual hazardous air pollutant (HAP) to 8.0 tons per rolling, 12-month period, the emissions of the total combined HAPs to 20.0 tons per rolling, 12-month period, and the emissions of the VOC and organic compound (OC) to 95.6 tons per rolling, 12-month period. The company proposed these emission limits to avoid Title V permitting and the Printing and Publishing MACT, 40 CFR Part 63, subpart KK. Mid-America Packaging has accepted these federally enforceable emission limits as a facility-wide cap on emissions from units K001, K002, K004, K009, K010, P001, and P002. To ensure enforceability during the first 12 calendar months of operation following the issuance of the PTI, the permittee shall not exceed these facility-wide emission levels specified in the following table:

Month(s)	VOC	OC	individual HAP	total combined HAPs
1	8.0 tons	0.7 tons	1.7 tons	
1-2	15.9 tons	1.3 tons	3.3 tons	
1-3	23.9 tons	2.0 tons	5.0 tons	
1-4	31.9 tons	2.7 tons	6.7 tons	
1-5	39.8 tons	3.3 tons	8.3 tons	
1-6	47.8 tons	4.0 tons	10.0 tons	
1-7	55.8 tons	4.7 tons	11.7 tons	
1-8	63.7 tons	5.3 tons	13.3 tons	
1-9	71.7 tons	6.0 tons	15.0 tons	
1-10	79.7 tons	6.7 tons	16.7 tons	
1-11	87.6 tons	7.3 tons	18.3 tons	
1-12	95.6 tons	8.0 tons	20.0 tons	

After the first 12 calendar months of operation following the issuance of the PTI, compliance with the annual emission limitation for VOC and OC, individual HAP, and total combined HAPs shall be based upon a rolling, 12-month summation of the monthly emissions. The volatile organic compound content of the coatings and inks employed shall not exceed the following limitations:

- a. forty per cent VOC by volume of the coating and ink, excluding water; or
- b. twenty-five per cent VOC by volume of the volatile matter in the coating and ink.

B. Operational Restrictions

1. Mid-America Packaging shall not operate emissions unit K003, K005, K006, K007, and K008.

C. Monitoring and/or Record Keeping Requirements

1. In order to determine compliance with the facility-wide emission limitations, the permittee shall maintain monthly records of the following information for the entire facility which consists of emission units K001, K002, K004, K009, K010, P001, and P002:
 - a. the name and identification of each coating and ink, as applied;
 - b. the VOC or OC content of each coating and ink, as applied, in pounds per gallon. This should include any thinning solvents added to the coatings at the facility;
 - c. the individual HAP content for each HAP of each coating or ink in pounds of individual HAP per gallon of coating or ink, as applied;
 - d. the total combined HAP content of each coating or ink in pounds of combined HAPs per gallon of coating or ink, as applied (sum all the individual HAP contents from c);
 - e. the number of gallons of each coating and ink employed;
 - f. the name and identification of each cleanup material employed;
 - g. the VOC or OC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from h);
 - j. the number of gallons of each cleanup material employed;
 - k. the total individual HAP emissions for the entire facility for each HAP from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (for each HAP the sum of c times e for each coating and ink and the sum of h times j for each cleanup material);
 - l. the total combined HAPs emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of d times e for each coating and ink and the sum of i times j for each cleanup material);
 - m. the total VOC and OC emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of b times e for each coating and ink and the sum of g times j for each cleanup material); and
 - n. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for the entire facility for each calendar month.
2. The permittee shall collect and record the following information each month for the line:
 - a. the name and identification number of each coating, as applied; and
 - b. the VOC content in percentage VOC by volume of the coating and ink (excluding water); or
 - c. the VOC content in percentage VOC by volume of the volatile matter in the 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.)
3. The permittee shall collect and record the following information each day for each line when a noncomplying coating is used:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content in percentage VOC by volume of the coating and ink (excluding water) or the VOC content in percentage VOC by volume of the volatile matter in the coating and ink and the number of gallons of each coating, as applied; and
 - c. the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,5 or CVOC,6.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for VOC and OC, individual HAP, and total combined HAPs and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition 3.
2. 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 and OC, individual HAP, and total combined HAPs for each month during the calendar year (January through December); and

- b. for the entire facility, the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for each month for the first 12 calendar months of operation following the issuance of this permit.
3. 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 unless the daily record shows that the daily volume-weighted average VOC content of all coatings employed on that day does not exceeds the applicable limitation. 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 45 days after the exceedance occurs.
4. The permittee shall submit an initial notification as required in 40 CFR 63, Subpart KK.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

8.0 tons of any individual HAP per rolling, 12-month period
 20.0 tons of total combined HAPs per rolling, 12-month period
 95.6 tons of VOC and OC per rolling, 12-month period

Applicable Compliance Method:

Monthly record keeping of the usage, the VOC or OC content, and the HAP content of each coating, ink, and cleanup material as required by Section C.1 of these terms and conditions. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings, inks, and cleanup materials. Formulation data shall be used to determine the HAP contents of the coatings, inks, and cleanup materials.

Emission Limitation:

forty per cent VOC by volume of the coating and ink, excluding water or twenty-five per cent 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.

Emission Limitation:

2.5 lbs/hr of VOC

Applicable Compliance Method:

Multiply the worst-case ink formulation for VOC by the maximum gallons of ink per hour. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the inks.

Emission Limitation:

0.5 lb/hr of ammonia

Applicable Compliance Method:

Multiply the worst-case ink formulation for ammonia by the maximum gallons of ink per hour. Formulation data shall be used to determine the ammonia contents of the inks.

F. Miscellaneous Requirements

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 16-1656. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the VOC and Ammonia emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen 3.0 model and a comparison of the predicted 1 hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Ammonia

TLV (mg/m3): 17
 Maximum Hourly Emission Rate (lbs/hr): 1.7*
 Predicted 1 Hour Maximum Ground-Level Concentration (MGLC) (ug/m3): 181.97
 MAGLC (ug/m3): 404.76

Pollutant: 2-Butoxyethanol

TLV (mg/m3): 121
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 2880.95

Pollutant: Dipropylene Glycol Monomethyl Ether

TLV (mg/m3): 606

Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 14428.57

Pollutant: Ethylene Glycol

TLV (mg/m3): 80
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 1904.76

Pollutant: Isopropanol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 23404.76

Pollutant: N-propyl alcohol

TLV (mg/m3): 492
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 11714.29
 Pollutant: Styrene

TLV (mg/m3): 213
 Maximum Hourly Emission Rate (lbs/hr): 8.4**
 Predicted 1 Hour MGLC (ug/m3): 900
 MAGLC (ug/m3): 5071.43

*1.7 lbs/hr is the total combined mass emissions allowable for ammonia for K009 and K010

**8.4 lbs/hr is the total combined mass emissions allowable for VOC for K009 and K010

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI number 16-1656 and the operating permit:

- a. Any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup 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 specified in the above table.
- b. Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table.
- c. Any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.
- d. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)].
- e. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" as defined in OAC rule 3745-77-01(V).

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

Facility ID: 1677130067 Emissions Unit ID: P001 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Cylinder preparation room	OAC rule 3745-31-05 (PTI 16-1655)	See A.2.a, A.2.b, and A.2.c below.
	OAC rule 3745-21-07(G)	8.0 lbs/hr of organic compound (OC) 40 lbs/day of OC

2. **Additional Terms and Conditions**

- (a) Mid-America Packaging has requested to restrict the emissions of any individual hazardous air pollutant (HAP) to 8.0 tons per rolling, 12-month period, the emissions of the total combined HAPs to 20.0 tons per rolling, 12-month period, and the emissions of the volatile organic compound (VOC) and OC to 95.6 tons per rolling, 12-month period. The company proposed these emission limits to avoid Title V permitting and the Printing and Publishing MACT, 40 CFR Part 63, subpart KK. Mid-America Packaging has accepted these federally enforceable emission limits as a facility-wide cap on emissions from units K001, K002, K004, K009, K010, P001, and P002. To ensure enforceability during the first 12 calendar months of operation following the issuance of the PTI, the permittee shall not exceed these facility-wide emission levels specified in the following table:

	Maximum	Maximum	Maximum
	Allowable	Allowable	Allowable
	Cumulative	Cumulative	Cumulative
Month(s)	VOC	OC	individual HAP total combined HAPs
1	8.0 tons	0.7 tons	1.7 tons
1-2	15.9 tons	1.3 tons	3.3 tons
1-3	23.9 tons	2.0 tons	5.0 tons
1-4	31.9 tons	2.7 tons	6.7 tons
1-5	39.8 tons	3.3 tons	8.3 tons
1-6	47.8 tons	4.0 tons	10.0 tons
1-7	55.8 tons	4.7 tons	11.7 tons
1-8	63.7 tons	5.3 tons	13.3 tons
1-9	71.7 tons	6.0 tons	15.0 tons
1-10	79.7 tons	6.7 tons	16.7 tons
1-11	87.6 tons	7.3 tons	18.3 tons
1-12	95.6 tons	8.0 tons	20.0 tons

After the first 12 calendar months of operation following the issuance of the PTI, compliance with the annual emission limitation for VOC and OC, individual HAP, and total combined HAPs shall be based upon a rolling, 12-month summation of the monthly emissions.

B. **Operational Restrictions**

1. Mid-America Packaging shall not operate emissions unit K003, K005, K006, K007, and K008.

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

1. In order to determine compliance with the facility-wide emission limitations, the permittee shall maintain monthly records of the following information for the entire facility which consists of emission units K001, K002, K004, K009, K010, P001, and P002:
 - a. the name and identification of each coating and ink, as applied;
 - b. the VOC or OC content of each coating and ink, as applied, in pounds per gallon. This should include any thinning solvents added to the coatings at the facility;
 - c. the individual HAP content for each HAP of each coating or ink in pounds of individual HAP per gallon of coating or ink, as applied;
 - d. the total combined HAP content of each coating or ink in pounds of combined HAPs per gallon of coating or ink, as applied (sum all the individual HAP contents from c);
 - e. the number of gallons of each coating and ink employed;
 - f. the name and identification of each cleanup material employed;
 - g. the VOC or OC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from h);
 - j. the number of gallons of each cleanup material employed;
 - k. the total individual HAP emissions for the entire facility for each HAP from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (for each HAP the sum of c times e for each coating and ink and the sum of h times j for each cleanup material);
 - l. the total combined HAPs emissions for the entire facility from all the coatings and inks and cleanup materials

employed, in tons per month and tons per rolling, 12-month period (the sum of d times e for each coating and ink and the sum of i times j for each cleanup material);

m. the total VOC and OC emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of b times e for each coating and ink and the sum of g times j for each cleanup material); and

n. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for the entire facility for each calendar month.

2. The permittee shall collect and record the following information for each day for the cylinder preparation room:
 - a. the company identification for each coating and cleanup material employed;
 - b. the number of gallons of each coating and cleanup material employed;
 - c. the organic compound content of each coating and cleanup material, in pounds per gallon;
 - d. the total organic compound emission rate for all coatings and cleanup materials, in pounds per day;
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly organic compound emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for VOC and OC, individual HAP, and total combined HAPs and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels.
2. 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 and OC, individual HAP, and total combined HAPs for each month during the calendar year (January through December); and
 - b. for the entire facility, the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for each month for the first 12 calendar months of operation following the issuance of this permit.
3. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. an identification of each day during which the average hourly organic compound emissions from the coatings and cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions from the coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition 3.
5. The permittee shall submit an initial notification as required in 40 CFR 63, Subpart KK.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation:

8.0 tons of any individual HAP per rolling, 12-month period
 20.0 tons of total combined HAPs per rolling, 12-month period
 95.6 tons of VOC and OC per rolling, 12-month period

Applicable Compliance Method:

Monthly record keeping of the usage, the VOC or OC content, and the HAP content of each coating, ink, and cleanup material as required by Section C.1 of these terms and conditions. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings, inks, and cleanup materials. Formulation data shall be used to determine the HAP contents of the coatings, inks, and cleanup materials.

Emission Limitation:

8.0 lbs/hr of OC

Applicable Compliance Method:

Daily records shall be maintained of the organic compound content of each coating and cleanup material employed, the daily usage of each coating and cleanup material employed, and the calculated average hourly organic compound emission rate for all coatings and cleanup materials employed, as required by Section C.2. Formulation data or USEPA Method 24 shall be used to determine the organic compound content of each coating and cleanup material.

Emission Limitation:

40 lbs/day of OC

Applicable Compliance Method:

Daily records shall be maintained of the organic compound content of each coating and cleanup material employed, the daily usage of each coating and cleanup material employed, and the calculated daily organic compound emission rate for all coatings and cleanup materials employed, as required in Section C.2. Formulation data or USEPA Method 24 shall be used to determine the organic compound content of each coating and cleanup material.

F. Miscellaneous Requirements

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 16-1655. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the VOC and Ammonia emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen 3.0 model and a comparison of the predicted 1 hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Ammonia

TLV (mg/m3): 17
 Maximum Hourly Emission Rate (lbs/hr): 3.03*
 Predicted 1 Hour MGLC (ug/m3): 184.1
 MAGLC (ug/m3): 404.76

Pollutant: Acetone

TLV (mg/m3): 1780
 Maximum Hourly Emission Rate (lbs/hr): 29.3*
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 42380.95

Pollutant: 2-Butoxyethanol

TLV (mg/m3): 121
 Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1352.4
 MAGLC (ug/m3): 2880.95

Pollutant: Dipropylene Glycol Monomethyl Ether

TLV (mg/m3): 606
 Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 14428.57

Pollutant: Ethylene Glycol

TLV (mg/m3): 80
 Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 1904.76

Pollutant: Isopropanol

TLV (mg/m3): 983
 Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 23404.76
 Pollutant: N-propyl alcohol

TLV (mg/m3): 492
 Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 11714.29

Pollutant: Styrene

TLV (mg/m3): 213
 Maximum Hourly Emission Rate (lbs/hr): 29.3**
 Predicted 1 Hour MGLC (ug/m3): 1325.4
 MAGLC (ug/m3): 5071.43

*3.03 lbs/hr is the total combined mass emissions allowable for ammonia for K001, K002, and K004.

**29.3 lbs/hr is the total combined mass emissions allowable for VOC for K001, K002, K004, and P001.

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI number 16-1656 and the operating permit:

a. Any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup 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 specified in the above table.

b. Any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of

exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table.

c. Any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01.

d. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)].

e. Any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" as defined in OAC rule 3745-77-01(V).

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

Facility ID: 1677130067 Emissions Unit ID: P002 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Cylinder maintenance area	OAC rule 3745-31-05 (PTI 16-1413, 16-1655, and 16-1656)	See A.2.a, A.2.b, and A.2.c below.
	OAC rule 3745-21-07(G)	8.0 lbs/hr of organic compound (OC) 40.0 lbs/hr of OC See A.2.d below.

2. Additional Terms and Conditions

- (a) Mid-America Packaging has requested to restrict the emissions of any individual hazardous air pollutant (HAP) to 8.0 tons per rolling, 12-month period, the emissions of the total combined HAPs to 20.0 tons per rolling, 12-month period, and the emissions of the volatile organic compounds (VOC) and organic compounds (OC) to 95.6 tons per rolling, 12-month period. The company proposed these emission limits to avoid Title V permitting and the Printing and Publishing MACT, 40 CFR Part 63, subpart KK. Mid-America Packaging has accepted these federally enforceable emission limits as a facility-wide cap on emissions from units K001, K002, K004, K009, K010, P001, and P002. To ensure enforceability during the first 12 calendar months of operation following the issuance of the PTI, the permittee shall not exceed these facility-wide emission levels specified in the following table:

Month(s)	VOC	OC	individual HAP	total combined HAPs
1	8.0 tons	0.7 tons	1.7 tons	
1-2	15.9 tons	1.3 tons	3.3 tons	
1-3	23.9 tons	2.0 tons	5.0 tons	
1-4	31.9 tons	2.7 tons	6.7 tons	
1-5	39.8 tons	3.3 tons	8.3 tons	
1-6	47.8 tons	4.0 tons	10.0 tons	
1-7	55.8 tons	4.7 tons	11.7 tons	
1-8	63.7 tons	5.3 tons	13.3 tons	
1-9	71.7 tons	6.0 tons	15.0 tons	
1-10	79.7 tons	6.7 tons	16.7 tons	
1-11	87.6 tons	7.3 tons	18.3 tons	
1-12	95.6 tons	8.0 tons	20.0 tons	

After the first 12 calendar months of operation following the issuance of the PTI, compliance with the annual emission limitation for VOC and OC, individual HAP, and total combined HAPs shall be based upon a rolling, 12-month summation of the monthly emissions.
The permittee shall not employ any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

B. Operational Restrictions

1. Mid-America Packaging shall not operate emissions unit K003, K005, K006, K007, and K008.

C. Monitoring and/or Record Keeping Requirements

1. In order to determine compliance with the facility-wide emission limitations, the permittee shall maintain monthly records of the following information for the entire facility which consists of emission units K001, K002, K004, K009, K010, P001, and P002:
 - a. the name and identification of each coating and ink, as applied;
 - b. the VOC or OC content of each coating and ink, as applied, in pounds per gallon. This should include any thinning solvents added to the coatings at the facility;
 - c. the individual HAP content for each HAP of each coating or ink in pounds of individual HAP per gallon of coating or ink, as applied;
 - d. the total combined HAP content of each coating or ink in pounds of combined HAPs per gallon of coating or ink, as applied (sum all the individual HAP contents from c);
 - e. the number of gallons of each coating and ink employed;
 - f. the name and identification of each cleanup material employed;
 - g. the VOC or OC content of each cleanup material, in pounds per gallon;
 - h. the individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied;
 - i. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from h);
 - j. the number of gallons of each cleanup material employed;
 - k. the total individual HAP emissions for the entire facility for each HAP from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (for each HAP the sum of c times e for each coating and ink and the sum of h times j for each cleanup material);
 - l. the total combined HAPs emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of d times e for each coating and ink and the sum of i times j for each cleanup material);
 - m. the total VOC and OC emissions for the entire facility from all the coatings and inks and cleanup materials employed, in tons per month and tons per rolling, 12-month period (the sum of b times e for each coating and ink and the sum of g times j for each cleanup material); and
 - n. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for the entire facility for each calendar month.
2. The permittee shall collect and record the following information for each day for the cylinder maintenance room:
 - a. the company identification for each coating and cleanup material employed;
 - b. the number of gallons of each coating and cleanup material employed;
 - c. the organic compound content of each coating and cleanup material, in pounds per gallon;
 - d. the total organic compound emission rate for all coatings and cleanup materials, in pounds per day;
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly organic compound emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for VOC and OC, individual HAP, and total combined HAPs and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels.
2. 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 and OC, individual HAP, and total combined HAPs for each month during the calendar year (January through December); and
 - b. for the entire facility, the cumulative emissions of VOC and OC, individual HAP, and total combined HAPs for each month for the first 12 calendar months of operation following the issuance of this permit.
3. The permittee shall submit deviation (excursion) reports which include the following information:

- a. an identification of each day during which the average hourly organic compound emissions from the coatings and cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - b. an identification of each day during which the organic compound emissions from the coatings and cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition 3.
 5. The permittee shall submit an initial notification as required in 40 CFR 63, Subpart KK.

E. Testing Requirements

1. Compliance with the emission limitations in Sections A.1 and A.2 of these terms and conditions shall be determined in accordance with the following methods:
Emission Limitation:

8.0 tons of any individual HAP per rolling, 12-month period
20.0 tons of total combined HAPs per rolling, 12-month period
95.6 tons of VOC and OC per rolling, 12-month period

Applicable Compliance Method:

Monthly record keeping of the usage, the VOC or OC content, and the HAP content of each coating, ink, and cleanup material as required by Section C.1 of these terms and conditions. USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings, inks, and cleanup materials. Formulation data shall be used to determine the HAP contents of the coatings, inks, and cleanup materials.

Emission Limitation:

8.0 lbs/hr of OC

Applicable Compliance Method:

Daily records shall be maintained of the organic compound content of each coating and cleanup material employed, the daily usage of each coating and cleanup material employed, and the calculated average hourly organic compound emission rate for all coatings and cleanup materials employed, as required by Section C.2. Formulation data or USEPA Method 24 shall be used to determine the organic compound content of each coating and cleanup material.

Emission Limitation:

40 lbs/hr of OC

Applicable Compliance Method:

Daily records shall be maintained of the organic compound content of each coating and cleanup material employed, the daily usage of each coating and cleanup material employed, and the calculated daily organic compound emission rate for all coatings and cleanup materials employed, as required in Section C.2. Formulation data or USEPA Method 24 shall be used to determine the organic compound content of each coating and cleanup material.

F. Miscellaneous Requirements

1. None