

Facility ID: 1677110026 Issuance type: Title V Draft Permit

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

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Part II - Specific Facility Terms and Conditions

a State and Federally Enforceable Section

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

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b State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:
 - B002 - R-Line Boiler (B-7) - 5,997,000 Btu/hr;
 - B018 - Industrial Reliance Boiler (B-12) - 8,400,000 Btu/hr;
 - B019 - Industrial Reliance Boiler (B-13) - 8,400,000 Btu/hr;
 - B020 - Industrial Reliance Boiler (B-14) - 8,400,000 Btu/hr;
 - Z001 - R&D Pilot Coater;
 - Z002 - Mixing Tank A-1 Cmpd Room A, 1100-gal;
 - Z003 - Mixing Tank A-2 Cmpd Room A, 1100-gal;
 - Z004 - Mixing Tank A-3 Cmpd Room A, 1100-gal;
 - Z005 - Mixing Tank A-4 Cmpd Room A, 1100-gal;
 - Z006 - Mixing Tank A-5 Cmpd Room A, 1100-gal;
 - Z007 - Mixing Tank A-6 Cmpd Room A, 1100-gal;
 - Z008 - Mixing Tank A-7 Cmpd Room A, 1100-gal;
 - Z009 - Mixing Tank A-8 Cmpd Room A, 1100-gal;
 - Z010 - Feed Tank A-9 Cmpd Room A, 1100-gal;
 - Z011 - Feed Tank A-10 Cmpd Room A, 1100-gal;
 - Z012 - Feed Tank A-11 Cmpd Room A, 1100-gal;
 - Z013 - Feed Tank A-12 Cmpd Room A, 1100-gal;
 - Z014 - Compound Room R;
 - Z015 - Underground Storage Tank T01, 10,000-gal;
 - Z016 - Underground Storage Tank T02, 10,000-gal;
 - Z017 - Underground Storage Tank T03, 10,000-gal;
 - Z018 - Underground Storage Tank T04 10,000-gal;
 - Z019 - Underground Storage Tank T05, 10,000-gal;
 - Z020 - Underground Storage Tank T06, 10,000-gal;
 - Z021 - Mixing Tank B-1 Cmpd Room B, 1100-gal;
 - Z022 - Mixing Tank B-2 Cmpd Room B, 1100-gal;
 - Z023 - Mixing Tank B-3 Cmpd Room B, 1100-gal;
 - Z024 - Mixing Tank B-4 Cmpd Room B, 1100-gal;
 - Z025 - Mixing Tank B-5 Cmpd Room B, 1100-gal;
 - Z026 - Mixing Tank B-6 Cmpd Room B, 1100-gal;
 - Z027 - Mixing Tank B-7 Cmpd Room B, 1100-gal;
 - Z028 - Mixing Tank B-8 Cmpd Room B, 1100-gal;
 - Z029 - Mixing Tank B-9 Cmpd Room B, 1700-gal;
 - Z030 - Storage Tank C-7 Cmpd Room B-Annex, 5900-gal;
 - Z031 - Storage Tank C-8 Cmpd Room B-Annex, 5900-gal;
 - Z032 - Storage Tank C-9 Cmpd Room B-Annex, 5900-gal;
 - Z033 - Rubber Grinder;
 - Z034 - Storage Tank C-10 Cmpd Room B-Annex;
 - Z035 - Storage Tank C-1 Cmpd Room C, 1530-gal;
 - Z036 - Storage Tank C-2 Cmpd Room C, 1530-gal;
 - Z037 - Storage Tank C-11 Cmpd Room C-Annex, 5500-gal;
 - Z038 - Storage Tank C-12 Cmpd Room C-Annex, 5500-gal;
 - Z039 - Storage Tank C-13 Cmpd Room C-Annex, 5500-gal;
 - Z040 - Storage Tank C-14 Cmpd Room C-Annex, 5500-gal;
 - Z041 - Storage Tank C-15 Cmpd Room C-Annex, 5500-gal;

Z042 - Storage Tank C-16 Cmpd Room C-Annex, 5500-gal;
 Z043 - Storage Tank C-17 Cmpd Room C-Annex, 5500-gal;
 Z044 - Storage Tank C-18 Cmpd Room C-Annex, 5500-gal;
 Z045 - Compound Room R;
 Z046 - DCI Distillation Unit;
 Z047 - Storage Tank V-2, 500-gal;
 Z048 - Storage Tank V-3, 1100-gal;
 Z049 - Storage Tank V-4, 1100-gal;
 Z050 - Gravure Roll/Mayer Rod Cleaning Station, CS-1;
 Z051 - Solvent Recovery Decanter Tank, D-4;
 Z052 - Solvent Recovery Dirty Solvent Collection Tank, D-5;
 Z053 - Solvent Recovery Seal Tank, D-7;
 Z054 - Solvent Recovery - Dirty Solvent Feed Tank, D-8;
 Z055 - PRI Distillation Unit, P-3;
 Z056 - Distilled Solvent Collection and Feed Tank, D10;
 Z057 - Laboratory Environmental Test Chambers;
 Z058 - Laboratory Fume Hood-Casting Room;
 Z059 - Laboratory Benchtop UV Curing Oven;
 Z060 - Environmental Test Chambers (2);
 Z061 - R&C Test Oven;
 Z062 - Pilot Plant Cleaning/Testing Bench;
 Z063 - R&D Hot Melt Adhesive Mixer, and Coater;
 Z064 - R&D Corona Treater;
 Z065 - R&D Screen Printing Unit;
 Z066 - R&D Casting Room Ovens;
 Z067 - QA Lab Fume Hood and Test Ovens;
 Z068 - QA Lab Fume Hood and Test Oven;
 Z069 - QA Lab Ovens;
 Z070 - Bottling Cage;
 Z071 - Welding Hood - Maintenance;
 Z072 - Hot Melt Solids Feed Hopper;
 Z073 - Hot Melt Melter/Mixer;
 Z074 - Burnham Hot Water Boiler B-1, 1,326,000 Btu/hr;
 Z075 - Burnham Hot Water Boiler B-2, 1,326,000 Btu/hr;
 Z076 - American Standard Hot Water Boiler B-3, 780,000 Btu/hr;
 Z077 - Underground Storage Tank T-01, 10,000-gal;
 Z078 - Underground Storage Tank T-02, 10,000-gal;
 Z079 - Underground Storage Tank T-03, 10,000-gal;
 Z080 - Underground Storage Tank T-04, 10,000-gal;
 Z081 - Underground Storage Tank T-05, 10,000-gal; and
 Z082 - Underground Storage Tank T-06, 10,000-gal.

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

The following insignificant emissions units are located at this facility:

B002 - R-Line Boiler (B-7) - 5,997,000 Btu/hr;
 B018 - Industrial Reliance Boiler (B-12) - 8,400,000 Btu/hr;
 B019 - Industrial Reliance Boiler (B-13) - 8,400,000 Btu/hr;
 B020 - Industrial Reliance Boiler (B-14) - 8,400,000 Btu/hr;
 Z001 - R&D Pilot Coater;
 Z002 - Mixing Tank A-1 Cmpd Room A, 1100-gal;
 Z003 - Mixing Tank A-2 Cmpd Room A, 1100-gal;
 Z004 - Mixing Tank A-3 Cmpd Room A, 1100-gal;
 Z005 - Mixing Tank A-4 Cmpd Room A, 1100-gal;
 Z006 - Mixing Tank A-5 Cmpd Room A, 1100-gal;
 Z007 - Mixing Tank A-6 Cmpd Room A, 1100-gal;
 Z008 - Mixing Tank A-7 Cmpd Room A, 1100-gal;
 Z009 - Mixing Tank A-8 Cmpd Room A, 1100-gal;
 Z010 - Feed Tank A-9 Cmpd Room A, 1100-gal;
 Z011 - Feed Tank A-10 Cmpd Room A, 1100-gal;
 Z012 - Feed Tank A-11 Cmpd Room A, 1100-gal;
 Z013 - Feed Tank A-12 Cmpd Room A, 1100-gal;
 Z014 - Compound Room R;
 Z015 - Underground Storage Tank T01, 10,000-gal;
 Z016 - Underground Storage Tank T02, 10,000-gal;
 Z017 - Underground Storage Tank T03, 10,000-gal;
 Z018 - Underground Storage Tank T04 10,000-gal;
 Z019 - Underground Storage Tank T05, 10,000-gal;
 Z020 - Underground Storage Tank T06, 10,000-gal;
 Z021 - Mixing Tank B-1 Cmpd Room B, 1100-gal;
 Z022 - Mixing Tank B-2 Cmpd Room B, 1100-gal;
 Z023 - Mixing Tank B-3 Cmpd Room B, 1100-gal;
 Z024 - Mixing Tank B-4 Cmpd Room B, 1100-gal;
 Z025 - Mixing Tank B-5 Cmpd Room B, 1100-gal;
 Z026 - Mixing Tank B-6 Cmpd Room B, 1100-gal;
 Z027 - Mixing Tank B-7 Cmpd Room B, 1100-gal;
 Z028 - Mixing Tank B-8 Cmpd Room B, 1100-gal;
 Z029 - Mixing Tank B-9 Cmpd Room B, 1700-gal;
 Z030 - Storage Tank C-7 Cmpd Room B-Annex, 5900-gal;
 Z031 - Storage Tank C-8 Cmpd Room B-Annex, 5900-gal;
 Z032 - Storage Tank C-9 Cmpd Room B-Annex, 5900-gal;
 Z033 - Rubber Grinder;
 Z034 - Storage Tank C-10 Cmpd Room B-Annex;
 Z035 - Storage Tank C-1 Cmpd Room C, 1530-gal;

Z036 - Storage Tank C-2 Cmpd Room C, 1530-gal;
Z037 - Storage Tank C-11 Cmpd Room C-Annex, 5500-gal;
Z038 - Storage Tank C-12 Cmpd Room C-Annex, 5500-gal;
Z039 - Storage Tank C-13 Cmpd Room C-Annex, 5500-gal;
Z040 - Storage Tank C-14 Cmpd Room C-Annex, 5500-gal;
Z041 - Storage Tank C-15 Cmpd Room C-Annex, 5500-gal;
Z042 - Storage Tank C-16 Cmpd Room C-Annex, 5500-gal;
Z043 - Storage Tank C-17 Cmpd Room C-Annex, 5500-gal;
Z044 - Storage Tank C-18 Cmpd Room C-Annex, 5500-gal;
Z045 - Compound Room R;
Z046 - DCI Distillation Unit;
Z047 - Storage Tank V-2, 500-gal;
Z048 - Storage Tank V-3, 1100-gal;
Z049 - Storage Tank V-4, 1100-gal;
Z050 - Gravure Roll/Mayer Rod Cleaning Station, CS-1;
Z051 - Solvent Recovery Decanter Tank, D-4;
Z052 - Solvent Recovery Dirty Solvent Collection Tank, D-5;
Z053 - Solvent Recovery Seal Tank, D-7;
Z054 - Solvent Recovery - Dirty Solvent Feed Tank, D-8;
Z055 - PRI Distillation Unit, P-3;
Z056 - Distilled Solvent Collection and Feed Tank, D10;
Z057 - Laboratory Environmental Test Chambers;
Z058 - Laboratory Fume Hood-Casting Room;
Z059 - Laboratory Benchtop UV Curing Oven;
Z060 - Environmental Test Chambers (2);
Z061 - R&C Test Oven;
Z062 - Pilot Plant Cleaning/Testing Bench;
Z063 - R&D Hot Melt Adhesive Mixer, and Coater;
Z064 - R&D Corona Treater;
Z065 - R&D Screen Printing Unit;
Z066 - R&D Casting Room Ovens;
Z067 - QA Lab Fume Hood and Test Ovens;
Z068 - QA Lab Fume Hood and Test Oven;
Z069 - QA Lab Ovens;
Z070 - Bottling Cage;
Z071 - Welding Hood - Maintenance;
Z072 - Hot Melt Solids Feed Hopper;
Z073 - Hot Melt Melter/Mixer;
Z074 - Burnham Hot Water Boiler B-1, 1,326,000 Btu/hr;
Z075 - Burnham Hot Water Boiler B-2, 1,326,000 Btu/hr;
Z076 - American Standard Hot Water Boiler B-3, 780,000 Btu/hr;
Z077 - Underground Storage Tank T-01, 10,000-gal;
Z078 - Underground Storage Tank T-02, 10,000-gal;
Z079 - Underground Storage Tank T-03, 10,000-gal;
Z080 - Underground Storage Tank T-04, 10,000-gal;
Z081 - Underground Storage Tank T-05, 10,000-gal; and
Z082 - Underground Storage Tank T-06, 10,000-gal.

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

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1677110026 Emissions Unit ID: B015 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
N-line boiler (B-9) - natural gas-fired 10,150,000 Btu/hr thermal oil heater	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	.020 pound of particulate emissions per mmBtu of actual heat input
	OAC rule 3745-18-06	None, the provisions of this rule are not applicable to this emissions unit.
	OAC rule 3745-21-08(B)	None, see A.I.2 below.
	OAC rule 3745-23-06(B)	None, see A.I.2 below.

2. Additional Terms and Conditions

- a. The design of the emissions unit and the technology associated with the current operating practices will satisfy the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively.

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II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

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III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than

natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

.020 pound of particulate emissions per mmBtu of actual heat input

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the particulate emission factor of 1.9 lbs/mmcf by the emissions unit's maximum hourly gas consumption rate of 10,100 cuft/hr, and then dividing by the emissions unit's rated heat input capacity of 10.15 mmBtu/hr.

The particulate emission factor was obtained from AP-42, 5th Edition, Volume I, Chapter 1, Table 1.4-2, dated July, 1998.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

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VI. **Miscellaneous Requirements**

1. None

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B. State Enforceable Section

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

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1677110026 Emissions Unit ID: K003 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line D - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H) 40 CFR Part 63, Subpart KK	See A.I.2.a and A.I.2.b below. exempt
		See A.II.2 below.

2. **Additional Terms and Conditions**

- a. The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- b. In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

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II. Operational Restrictions

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. The permittee shall not employ more than 400 kg per month, for every month, of organic HAP on printing stations.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.

2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = \frac{\sum_{i=1}^n (D - C_i) V_i}{\sum_{i=1}^n (D - L_i)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

3. The actual daily VOC emissions (Ed) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$Ed = \sum_{i=1}^n V_i C_i (1 - F_i)$$

where:

Ed = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

 - a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
 - b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.
5. The permittee also shall collect and record the following information each day for the carbon adsorption system:
 - a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.
7. The permittee shall maintain records of the total volume and organic HAP content of each material applied in the printing stations during each month.

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IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that more than 400 kg of organic HAP was employed in the printing station. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in

accordance with the following methods:

- a. Emission Limitation:
 - facility-wide daily allowable VOC emission limitation
 - Applicable Compliance Method:
 - Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.
2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
 - c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
 - e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

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

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

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

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677110026 Emissions Unit ID: K003 Issuance type: Title V Draft Permit

B. State Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1677110026 Emissions Unit ID: K004 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line E - pressure sensitive coating	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.

line
 OAC rule 3745-21-09(H) See A.I.2.a and A.I.2.b below.
 40 CFR Part 63, Subpart KK exempt
 See A.II.2 below.

2. **Additional Terms and Conditions**

- a. The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- b. In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.
 The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

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II. **Operational Restrictions**

- 1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
- 2. The permittee shall not employ more than 400 kg per month, for every month, of organic HAP on printing stations.

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

- 1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - . i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.
- 2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = \frac{\sum_{i=1}^n (D - Ci) Vi}{\sum_{i=1}^n (D - Li)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;
 n = subscript denoting the total number of coatings employed for the day;
 i = subscript denoting a specific coating;
 V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;
 C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and
 L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

- 3. The actual daily VOC emissions (Ed) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

. n

$$E_d = \sum_{i=1}^n V_i C_i (1 - F_i)$$

. i=1

where:

E_d = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
 - b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.
5. The permittee also shall collect and record the following information each day for the carbon adsorption system:
- a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.
7. The permittee shall maintain records of the total volume and organic HAP content of each material applied in the printing stations during each month.

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IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that more than 400 kg of organic HAP was employed in the printing station. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.
2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
 - c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
 - e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

 - f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 1677110026 Emissions Unit ID: K004 Issuance type: Title V Draft Permit

B. State Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 1677110026 Emissions Unit ID: K005 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line F - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H) 40 CFR Part 63, Subpart KK	See A.I.2.a and A.I.2.b below. exempt
		See A.II.2 below.

2. Additional Terms and Conditions

- a. The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- b. In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

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II. Operational Restrictions

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. The permittee shall not employ more than 400 kg per month, for every month, of organic HAP on printing stations.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - . i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.
2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = (0.67) \sum_{i=1}^n (D - Ci) Vi \cdot Li$$
 where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

3. The actual daily VOC emissions (Ed) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$Ed = \sum_{i=1}^n Vi * Ci * (1 - Fi)$$

where:

Ed = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
- b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

5. The permittee also shall collect and record the following information each day for the carbon adsorption system:

- a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
- b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
- c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
- d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
- e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).

6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following

each 24-hour period.

7. The permittee shall maintain records of the total volume and organic HAP content of each material applied in the printing stations during each month.

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IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that more than 400 kg of organic HAP was employed in the printing station. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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V. Testing Requirements

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

- a. Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.

2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:

- a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.

- b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.

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

- d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

- e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

- f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification

shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1677110026 Emissions Unit ID: K005 Issuance type: Title V Draft Permit

B. State Enforceable Section

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

- 1. None.

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

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1677110026 Emissions Unit ID: K006 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line G - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H)	See A.I.2.a and A.I.2.b below.
	40 CFR Part 63, Subpart KK	exempt
		See A.II.4 below.

2. **Additional Terms and Conditions**

- a. The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- b. In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009 at MACTac, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

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II. **Operational Restrictions**

- 1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
- 2. For each catalytic incinerator, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions units controlled by a catalytic incinerator are in operation and employing VOC-containing coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance.
- 3. Each catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst in each catalytic incinerator, as determined during the annual catalytic activity test, shall be at least 90% at the test temperature equal to that temperature at which the inlet to the catalyst bed is set.
- 4. The permittee shall not employ more than 400 kg per month, for every month, of organic HAP on printing stations.

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

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - . i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.

2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = \frac{\sum_{i=1}^n (D - Ci) Vi Li}{\sum_{i=1}^n (D - Li)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

3. The actual daily VOC emissions (Ed) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$Ed = \sum_{i=1}^n Vi Ci (1 - Fi)$$

where:

Ed = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
 - b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.
5. The permittee also shall collect and record the following information each day for the carbon adsorption system:
 - a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.
7. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of each catalytic incinerator's catalyst bed when the emissions units controlled with the catalytic incinerators are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

 - a. all 3-hour blocks of time (when any emissions unit was in operation and employing VOC-containing coatings) during which the average temperature of the exhaust gases immediately before any catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance;
 - b. a log of the periods of time when any temperature monitoring device was not operating and the associated emissions unit(s) was/were in operation; and
 - c. a log of the periods of time when any catalytic oxidizer alarm system indicates a malfunction of any catalytic oxidizer or an indication from any catalytic oxidizer fail-safe control system that the capacity of any catalytic oxidizer has been exceeded.
8. The permittee shall perform a preventive maintenance inspection of each catalytic incinerator on an annual basis to evaluate the performance of each catalyst bed. The inspection shall consist of internal and visual inspections as detailed in the preventive maintenance checklist submitted to the Ohio EPA on February 12, 1999, and shall include a physical inspection of each unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. The checks of associated equipment shall be performed in accordance with the manufacturer's recommendations. Repair and replacement of equipment shall be performed as necessitated by the inspection. Samples of catalyst material shall be collected from each catalyst bed to perform the catalyst activity test described in section A.V.6.

The permittee shall maintain a record of the results of each annual inspection, as well as the results of each catalyst activity test required in section A.V.6.
9. The permittee shall maintain records of the total volume and organic HAP content of each material applied in the printing stations during each month.

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IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in section A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by a catalytic incinerator were in operation during which the average temperature of the exhaust gases immediately before any catalyst bed does not comply with the temperature limitation specified in section A.II.2.
4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
5. The permittee shall submit an annual report that includes the results of the annual catalyst activity tests required in section A.V.6. This annual report shall be submitted within 45 days after each catalyst activity test is performed.
6. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that more than 400 kg of organic HAP was employed in the printing station. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
 - facility-wide daily allowable VOC emission limitation
 - Applicable Compliance Method:
 - Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.
2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
 - c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
 - e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

 - f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

3. The permittee shall conduct, or have conducted, an annual catalyst activity test using the catalyst sample(s) collected during the annual preventive maintenance inspection described in section A.III.8. An intent to test notification shall not be required for the testing noted in this section. The procedure for the catalyst activity test shall be in accordance with the document titled "Catalyst Activity Procedures" as submitted to the Ohio EPA on February 18, 1999.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677110026 Emissions Unit ID: K006 Issuance type: Title V Draft Permit

B. State Enforceable Section

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

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677110026 Emissions Unit ID: K007 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

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

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line H/I - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H)	See A.I.2.a and A.I.2.b below.

2. **Additional Terms and Conditions**

- a. The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- b. In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009 at MACtac, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

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II. **Operational Restrictions**

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. For each catalytic incinerator, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions units controlled by a catalytic incinerator are in operation and employing VOC-containing coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance.
3. Each catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst in each catalytic incinerator, as determined during the annual catalytic activity test, shall be at least 90% at the test temperature equal to that temperature at which the inlet to the catalyst bed is set.

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

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:

- a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - . i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.

2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:

$$Ad = \frac{\sum_{i=1}^n (D - Ci) Vi}{\sum_{i=1}^n (D - Li)}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

3. The actual daily VOC emissions (Ed) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$Ed = \sum_{i=1}^n Vi Ci (1 - Fi)$$

where:

Ed = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
- b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

5. The permittee also shall collect and record the following information each day for the carbon adsorption

system:

- a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
 - b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
 - c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
 - d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
 - e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).
6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.
 7. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of each catalytic incinerator's catalyst bed when the emissions units controlled with the catalytic incinerators are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. all 3-hour blocks of time (when any emissions unit was in operation and employing VOC-containing coatings) during which the average temperature of the exhaust gases immediately before any catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance;
 - b. a log of the periods of time when any temperature monitoring device was not operating and the associated emissions unit(s) was/were in operation; and
 - c. a log of the periods of time when any catalytic oxidizer alarm system indicates a malfunction of any catalytic oxidizer or an indication from any catalytic oxidizer fail-safe control system that the capacity of any catalytic oxidizer has been exceeded.
8. The permittee shall perform a preventive maintenance inspection of each catalytic incinerator on an annual basis to evaluate the performance of each catalyst bed. The inspection shall consist of internal and visual inspections as detailed in the preventive maintenance checklist submitted to the Ohio EPA on February 12, 1999, and shall include a physical inspection of each unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. The checks of associated equipment shall be performed in accordance with the manufacturer's recommendations. Repair and replacement of equipment shall be performed as necessitated by the inspection. Samples of catalyst material shall be collected from each catalyst bed to perform the catalyst activity test described in section A.V.6.

The permittee shall maintain a record of the results of each annual inspection, as well as the results of each catalyst activity test required in section A.V.6.

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IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in section A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by a catalytic incinerator were in operation during which the average temperature

of the exhaust gases immediately before any catalyst bed does not comply with the temperature limitation specified in section A.II.2.

4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
5. The permittee shall submit an annual report that includes the results of the annual catalyst activity tests required in section A.V.6. This annual report shall be submitted within 45 days after each catalyst activity test is performed.

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V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.
2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
 - c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
 - e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

 - f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
3. The permittee shall conduct, or have conducted, an annual catalyst activity test using the catalyst sample(s) collected during the annual preventive maintenance inspection described in section A.III.8. An intent to test notification shall not be required for the testing noted in this section. The procedure for the catalyst activity test shall be in accordance with the document titled "Catalyst Activity Procedures" as submitted to the Ohio EPA on February 18, 1999.

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1677110026 Emissions Unit ID: K007 Issuance type: Title V Draft Permit

B. State Enforceable Section

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

- 1. None.

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

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1677110026 Emissions Unit ID: K008 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line J - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H)	See A.I.2.a and A.I.2.b below.

2. Additional Terms and Conditions

- a. The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- b. In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009 at MACtac, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

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II. Operational Restrictions

1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
2. For each catalytic incinerator, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions units controlled by a catalytic incinerator are in operation and employing VOC-containing coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance.
3. Each catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst in each catalytic incinerator, as determined during the annual catalytic activity test, shall be at least 90% at the test temperature equal to that temperature at which the inlet to the catalyst bed is set.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.
2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:
 - n (D - Ci)

$$Ad = (0.67) \sum_{i=1}^n Vi * Li \text{ -----}$$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

3. The actual daily VOC emissions (Ed) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$Ed = \sum_{i=1}^n Vi * Ci * (1 - Fi)$$

where:

Ed = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and

b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

5. The permittee also shall collect and record the following information each day for the carbon adsorption system:

a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);

b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);

c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);

d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and

e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).

6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for

the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.

7. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of each catalytic incinerator's catalyst bed when the emissions units controlled with the catalytic incinerators are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. all 3-hour blocks of time (when any emissions unit was in operation and employing VOC-containing coatings) during which the average temperature of the exhaust gases immediately before any catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance;
 - b. a log of the periods of time when any temperature monitoring device was not operating and the associated emissions unit(s) was/were in operation; and
 - c. a log of the periods of time when any catalytic oxidizer alarm system indicates a malfunction of any catalytic oxidizer or an indication from any catalytic oxidizer fail-safe control system that the capacity of any catalytic oxidizer has been exceeded.
8. The permittee shall perform a preventive maintenance inspection of each catalytic incinerator on an annual basis to evaluate the performance of each catalyst bed. The inspection shall consist of internal and visual inspections as detailed in the preventive maintenance checklist submitted to the Ohio EPA on February 12, 1999, and shall include a physical inspection of each unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. The checks of associated equipment shall be performed in accordance with the manufacturer's recommendations. Repair and replacement of equipment shall be performed as necessitated by the inspection. Samples of catalyst material shall be collected from each catalyst bed to perform the catalyst activity test described in section A.V.6.

The permittee shall maintain a record of the results of each annual inspection, as well as the results of each catalyst activity test required in section A.V.6.

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IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in section A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by a catalytic incinerator were in operation during which the average temperature of the exhaust gases immediately before any catalyst bed does not comply with the temperature limitation specified in section A.II.2.
4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.
5. The permittee shall submit an annual report that includes the results of the annual catalyst activity tests required in section A.V.6. This annual report shall be submitted within 45 days after each catalyst activity test is performed.

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V. Testing Requirements

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

- a. Emission Limitation:
- facility-wide daily allowable VOC emission limitation
- Applicable Compliance Method:
- Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.
2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
- a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
- b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
- c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
- e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.
- All testing must follow the requirements of OAC rule 3745-21-10(A).
- f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
3. The permittee shall conduct, or have conducted, an annual catalyst activity test using the catalyst sample(s) collected during the annual preventive maintenance inspection described in section A.III.8. An intent to test notification shall not be required for the testing noted in this section. The procedure for the catalyst activity test shall be in accordance with the document titled "Catalyst Activity Procedures" as submitted to the Ohio EPA on February 18, 1999.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677110026 Emissions Unit ID: K008 Issuance type: Title V Draft Permit

B. State Enforceable Section

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

state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

1. None

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1677110026 Emissions Unit ID: K009 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line K - pressure sensitive coating line	OAC rule 3745-21-09(F)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-21-09(H) 40 CFR Part 63, Subpart KK	See A.I.2.a and A.I.2.b below. exempt
		See A.II.5 below.

2. **Additional Terms and Conditions**

- a. The requirements of this rule have been replaced by the requirements specified in the facility specific SIP revision approved by USEPA - Region 5 and promulgated in the Federal Register on xx-xx-xx.
- b. In lieu of the applicable limitations in OAC rules 3745-21-09(F) and 3745-21-09(H), the actual daily emissions of VOC from all of the emissions units K003 through K009 at MACtac, calculated in accordance with section A.III.3, shall comply each day with the facility-wide, daily allowable VOC emission limitation, calculated in accordance with section A.III.2.

The VOC contents of the coating materials shall be determined in accordance with OAC rule 3745-21-10(B) and USEPA Method 24.

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II. **Operational Restrictions**

- 1. For the carbon adsorption system, the average VOC concentration in the exhaust gases from the carbon adsorber, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions units controlled by the carbon adsorption system were in compliance.
- 2. For each catalytic incinerator, the average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions units controlled by a catalytic incinerator are in operation and employing VOC-containing coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance.
- 3. Each catalytic incinerator shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The conversion efficiency of the catalyst in each catalytic incinerator, as determined during the annual catalytic activity test, shall be at least 90% at the test temperature equal to that temperature at which the inlet to the catalyst bed is set.
- 4. Each permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than -0.007 inch of water, whenever the emissions unit controlled by the permanent total enclosure (K009) is in operation and employing VOC-containing coatings, excluding momentary fluctuations resulting from entering and exiting any permanent total enclosure to perform required maintenance or operational activities.

The doors to each permanent total enclosure shall remain in a closed position during the routine operation of emissions unit K009, except to perform required maintenance or operational activities.
- 5. The permittee shall not employ more than 400 kg per month, for every month, of organic HAP on printing stations.

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

- 1. The permittee shall collect and record the following information each day for each coating employed in coating lines K003 through K009:
 - a. the name and identification number;
 - b. the VOC content, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - c. the volume of coating applied, in gallons of coating, excluding water and exempt solvents;
 - d. the density of the VOC content, in pounds of VOC per gallon of VOC; and
 - e. the line in which the coating is applied, and, if applicable, an identification of any VOC control system to which the coating's VOC emissions are being vented;
 - . i. if the control system is a carbon adsorber, record whether the VOC in the coating is recoverable or not recoverable via this control technology.
- 2. The daily allowable VOC emission limitation for coating lines K003 through K009 shall be calculated in accordance with the following equation and recorded on a daily basis:
 - . $n (D - C_i)$
 - Ad = (0.67) SUMMATION $V_i * L_i$ -----
 - . $i=1 (D - L_i)$

where:

Ad = the daily allowable VOC emission limitation for coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents;

D = the density of VOC in each coating applied, in pounds of VOC per gallon of VOC (for the purpose of calculating Ad, a standard density of 7.36 will be used for all coatings); and

L = the emission limitation for each surface coating applied (this is 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a paper coating, and 4.8 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a vinyl coating).

3. The actual daily VOC emissions (Ed) from coating lines K003 through K009 shall be determined in accordance with the following equation and recorded on a daily basis:

$$E_d = \sum_{i=1}^n V_i \cdot C_i \cdot (1 - F_i)$$

where:

Ed = the actual daily VOC emissions from coating lines K003 through K009, in pounds of VOC;

n = subscript denoting the total number of coatings employed for the day;

i = subscript denoting a specific coating;

V = volume of each surface coating applied for the day, in gallons of coating, excluding water and exempt solvents;

C = VOC content of each surface coating as applied, in pounds of VOC per gallon of coating, excluding water and exempt solvents; and

F = fraction, by weight, of VOC emissions from the coating reduced or prevented from being emitted to the ambient air (this is the overall efficiency of the capture system and control device).

4. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorption system when the emissions units controlled by the carbon adsorption system are in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9. The organic monitoring device and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. a log of the periods of time when the capture (collection) system, control device, and monitoring equipment were not operating and the associated emissions units were in operation; and
- b. all 3-hour blocks of time (when the emissions units were in operation) during which the average VOC concentration in the exhaust gases was more than 20 percent greater than the average concentration during the most recent performance test that demonstrated the emissions units were in compliance.

5. The permittee also shall collect and record the following information each day for the carbon adsorption system:

- a. the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds per day (T);
- b. the rolling, 7-day summation of the total uncontrolled VOC emissions from all the coatings being vented to the carbon adsorption system, in pounds (T7);
- c. the amount of VOC recovered by the carbon adsorption system, in pounds per day (VOCrec);
- d. the rolling, 7-day summation of the amount of VOC recovered by the carbon adsorption system, in pounds (VOCrec,7); and
- e. the rolling, 7-day average overall, fractional control efficiency of the carbon adsorption system (SRE7).

6. The overall control efficiency of the carbon adsorption system shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with the following modifications: The permittee shall obtain data each day for the solvent usage and solvent recovery and determine the solvent recovery efficiency of the system each day using a rolling, 7-day period. The recovery efficiency for each day is computed as the ratio of the total recovered solvent for that day and the prior 6 consecutive operating days to the total solvent usage for the

same 7-day period used for the recovered solvent, rather than a 30-day weighted average as given in 40 CFR 60.433. This ratio shall be expressed as a percentage. This shall be done within 72 hours following each 24-hour period.

7. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of each catalytic incinerator's catalyst bed when the emissions units controlled with the catalytic incinerators are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day any VOC-containing coatings are employed:

- a. all 3-hour blocks of time (when any emissions unit was in operation and employing VOC-containing coatings) during which the average temperature of the exhaust gases immediately before any catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions units were in compliance;
 - b. a log of the periods of time when any temperature monitoring device was not operating and the associated emissions unit(s) was/were in operation; and
 - c. a log of the periods of time when any catalytic oxidizer alarm system indicates a malfunction of any catalytic oxidizer or an indication from any catalytic oxidizer fail-safe control system that the capacity of any catalytic oxidizer has been exceeded.
8. The permittee shall perform a preventive maintenance inspection of each catalytic incinerator on an annual basis to evaluate the performance of each catalyst bed. The inspection shall consist of internal and visual inspections as detailed in the preventive maintenance checklist submitted to the Ohio EPA on February 12, 1999, and shall include a physical inspection of each unit and checks of associated equipment, including but not limited to burners, controls, dampers, valves, and monitoring and recording equipment. The checks of associated equipment shall be performed in accordance with the manufacturers recommendations. Repair and replacement of equipment shall be performed as necessitated by the inspection. Samples of catalyst material shall be collected from each catalyst bed to perform the catalyst activity test described in section A.V.6.

The permittee shall maintain a record of the results of each annual inspection, as well as the results of each catalyst activity test required in section A.V.6.

9. The permittee shall maintain and operate monitoring devices and a recorder which continuously and simultaneously measures the pressure inside and outside of each permanent total enclosure on emissions unit K009 any time VOC-containing coatings are employed. The monitoring and recording devices shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall record and maintain, on a daily basis, the difference in pressure between the permanent total enclosure and the surrounding area(s) when VOC-containing coatings are employed.

10. The permittee shall maintain records of the total volume and organic HAP content of each material applied in the printing stations during each month.

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IV. Reporting Requirements

1. In lieu of the applicable reporting requirements in OAC rule 3745-21-09(B)(3), the permittee shall submit quarterly deviation (excursion) reports that identify any daily record that demonstrates a failure to comply with the daily allowable VOC emission limitation calculated each day in accordance with the equation specified in section A.III.2.

Each quarterly deviation report also shall include the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

If no excursions occur during a calendar quarter, the permittee shall submit a report stating such, along with the total annual VOC emissions from emissions unit K009, in tons, through that quarter for which the report is submitted.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by the carbon adsorption system were in operation during which the average VOC concentration of the exhaust gases from the carbon adsorption system exceeded the concentration limitation specified in section A.II.1.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions units controlled by a catalytic incinerator were in operation during which the average temperature of the exhaust gases immediately before any catalyst bed does not comply with the temperature limitation specified in section A.II.2.
4. The permittee shall submit quarterly pressure differential deviation (excursion) reports that identify all periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified in section A.II.4.
5. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c of this permit.

6. The permittee shall submit an annual report that includes the results of the annual catalyst activity tests required in section A.V.6. This annual report shall be submitted within 45 days after each catalyst activity test is performed.
7. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that more than 400 kg of organic HAP was employed in the printing station. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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V. **Testing Requirements**

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

facility-wide daily allowable VOC emission limitation

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3.
2. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:
 - a. The emission testing shall be conducted no later than 6 months after permit issuance and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to determine the control efficiency of the catalytic incinerators and the carbon adsorption system, the capture efficiency for coating lines vented to the catalytic incinerators and the carbon adsorption system, and the percent overall VOC emissions reduction of the carbon adsorption system.
 - c. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10(C) or such alternatives approved by USEPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
 - d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA Guidelines for Determining Capture Efficiency, dated January 9, 1995. The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
 - e. The percent overall VOC emission reduction of the carbon adsorption system shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60.433 with a rolling, 7-day average, as specified in section A.III.6.

All testing must follow the requirements of OAC rule 3745-21-10(A).

 - f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
3. The permittee shall conduct, or have conducted, an annual catalyst activity test using the catalyst sample(s) collected during the annual preventive maintenance inspection described in section A.III.8. An intent to test notification shall not be required for the testing noted in this section. The procedure for the catalyst activity test shall be in accordance with the document titled "Catalyst Activity Procedures" as submitted to the Ohio EPA on February 18, 1999.

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1677110026 Emissions Unit ID: K009 Issuance type: Title V Draft Permit

B. State Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 1677110026 Emissions Unit ID: K011 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paper coating line N - hot melt adhesives/solid silicone	OAC rule 3745-21-09(F)	2.9 lbs of volatile organic compounds (VOC) per gallon of coating, excluding water and exempt solvents
2. Additional Terms and Conditions		
(a) None		

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

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

(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.)

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that included an identification of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

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V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
 - a. Emission Limitation:

2.9 lbs of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance shall be demonstrated based upon the records required pursuant to section A.III.1.

U.S. EPA Method 24 shall be used to determine the VOC content for all coatings employed. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative statements for Method 24.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677110026 Emissions Unit ID: K011 Issuance type: Title V Draft Permit

B. State Enforceable Section

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

1. None.

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

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1677110026 Emissions Unit ID: K014 Issuance type: Title V Draft Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line L - emulsion hot melt paper	OAC rule 3745-31-05 (PTI 16-1789)	54.0 lbs/hr of volatile organic compounds (VOC)
coating line	OAC rule 3745-21-09(F)	35.0 tons of VOC/rolling, 12-month period
	40 CFR Part 60, Subpart RR	See A.I.2.a below.
		0.20 kilogram of VOC per kilogram of coating solids

2. Additional Terms and Conditions

- a. The emission limitation based on this applicable rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart RR.

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II. Operational Restrictions

1. The emissions of VOC from this emissions unit shall not exceed 35.0 tons/yr, based upon a rolling, 12-month summation of the monthly emissions.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

Month(s) Maximum Allowable Cumulative Emissions of VOC (Tons)

- 1-3 13.0
- 1-2 6.0
- 1-3 12.0
- 1-4 15.0
- 1-5 18.0
- 1-6 21.0
- 1-7 24.0
- 1-8 27.0
- 1-9 30.0
- 1-10 33.0
- 1-11 35.0
- 1-12 35.0

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitation for VOC shall be based upon a rolling, 12-month summation of the monthly emissions.

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for the coating operation:
 - 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 mass of each coating applied, in kilograms;
 - d. the VOC content of each coating and cleanup material, in pounds per gallon;
 - e. the weight fraction of organics applied of each coating applied;
 - f. the weight fraction of solids applied of each coating applied;

- g. the VOC emission rate for all coatings and cleanup materials, in pounds;
 - h. the calculated weighted average mass of VOC per mass of coating solids applied, in kilograms of VOC/kilograms of coating solids (see equation in section A.V.1.a);
 - i. the total number of hours the emissions unit was in operation; and
 - j. the average hourly VOC emission rate for all coatings and cleanup materials, i.e., (g)/(i), in pounds per hour (average).
- [Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

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IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative VOC emission levels;
 - b. after the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month VOC emission limitation; and
 - c. an identification of each month during which the average hourly VOC emissions exceeded 54.0 lbs/hr, and the actual average hourly VOC emissions for each such month.

The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.I.c.ii of this permit.
- 2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing that the weighted average VOC emission rate 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.

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V. Testing Requirements

- 1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:
 - 0.20 kilogram of VOC per kilogram of coating solids applied
 - Applicable Compliance Method:

The permittee shall calculate a weighted average of the mass of solvent used per mass of coating solids applied for each calendar month based upon the records required pursuant to section A.III.1 and the following equation:

$$G = \frac{\sum_{i=1}^n W_{oi} * M_{ci}}{\sum_{i=1}^n W_{si} * M_{ci}}$$

where:

 - G = the calculated weighted average mass (kg) of VOC per mass (kg) of coating solids applied each calendar month;
 - n = subscript denoting the total number of coatings employed;
 - i = subscript denoting a specific coating;
 - W_{oi} = the weight fraction of organics applied of each coating applied during a calendar month;
 - W_{si} = the weight fraction of solids applied of each coating applied during a calendar month; and
 - M_{ci} = the total mass (kg) of each coating applied during the calendar month as determined from facility records.
 - b. Emission Limitations:
 - 54.0 lbs/hr of VOC
 - 35.0 tons of VOC/rolling, 12-month period
 - Applicable Compliance Method:

Compliance shall be demonstrated based upon the records required pursuant to section A.III.1.

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

2. The permittee shall determine the weight fraction of organics and the weight fraction of solids for each coating applied by either 40 CFR Part 60, Appendix A, Method 24 or by the coating manufacturer's formulation data. In the event of any inconsistency between a Method 24 test and manufacturer's formulation data, the Method 24 test will govern. The Director and/or Administrator may require the permittee to perform Method 24 tests when deemed appropriate. For Method 24, the coating sample must be a one liter sample taken into a one liter container at a point where the sample will be representative of the coating applied to the web substrate.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1677110026 Emissions Unit ID: K014 Issuance type: Title V Draft Permit

B. State Enforceable Section

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

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
coating line L - emulsion hot melt paper coating line		

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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

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

Pollutant: vinyl acetate
 TLV (mg/m3): 35
 Maximum Hourly Emission Rate (lbs/hr): 54

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 440.1
MAGLC (ug/m3): 833.3

Pollutant: ethyl acrylate

TLV (mg/m3): 20
Maximum Hourly Emission Rate (lbs/hr): 54
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 440.1
MAGLC (ug/m3): 476

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None