

Facility ID: 1677130078 Issuance type: Final State Permit To Operate

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

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

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

- [Go to Part II for Emissions Unit P001](#)
- [Go to Part II for Emissions Unit R001](#)
- [Go to Part II for Emissions Unit R002](#)
- [Go to Part II for Emissions Unit R003](#)

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Facility ID: 1677130078 Emissions Unit ID: P001 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Wood product processing equipment which includes various types of saws, sanders, etc. - Dust Collector 1.	OAC rule 3745-31-05(A)(3) (PTI 16-02358)	1.9 pounds of particulate emissions (PE) per hour  8.32 tons of PE per year  The permittee shall employ equipment (e.g., hoods) to capture and vent the particulate emissions to a baghouse/fabric filter.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed five percent opacity, as a six-minute average. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**
  - (a) The hourly and annual PE emission limitations are based on the emissions unit's potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with these limits.

**B. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 4.5 inches of water while the emissions unit is in operation.

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

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

**D. Reporting Requirements**

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions.

**E. Testing Requirements**

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

Emission Limitation

1.9 pounds of PE per hour

Applicable Compliance Method

Compliance shall be determined by either multiplying the maximum uncontrolled particulate emissions of 187.5 pounds of particulate emissions per hour\* by (1-0.99\*\*) or if required, by performing an emissions test in accordance with OAC rule 3745-17-03(B)(10).

\*The uncontrolled emission rate was determined by the amount of wood dust collected by the baghouse.

\*\*Control efficiency of the baghouse.  
Emission Limitation

8.32 tons of PE per year

Applicable Compliance Method

Compliance with the annual emission limitation shall be determined by multiplying the allowable hourly emission limitation by 8760 hours per year, then divide by 2000 pounds per ton.

Emission Limitation

Visible particulate emissions from any stack shall not exceed five percent opacity, as a six-minute average.

Applicable Compliance Method

OAC rule 3745-17-03(B)(1)

F. **Miscellaneous Requirements**

1. None

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Facility ID: 1677130078 Emissions Unit ID: R001 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R001 - Makor Iride 206 automatic trim spraying machine.	OAC rule 3745-31-05(A)(3) (PTI 16-02358)	47.3 pounds of organic compounds (OC) per day for coatings
		9.12 tons of OC per year for coatings and cleanup materials
		0.1 pound of particulate emissions (PE) per hour
		0.44 ton of PE per year
		Visible particulate emissions from any stack shall not exceed five percent opacity, as a six-minute average.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-21-07(G)(4).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less

OAC rule 3745-17-11	stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). When employing, applying, evaporating, or drying any photochemically reactive material, or substance containing such photochemically reactive material, the permittee shall not discharge more than 40 pounds of organic material into the atmosphere in any one day, nor more than 8 pounds of organic material in any one hour.
OAC rule 3745-21-07(G)(4)	Emissions of organic material to the atmosphere from the cleanup with photochemically reactive materials of any article, machine, equipment, or other contrivance, shall be included with the other emissions of organic materials from that article, machine, equipment, or other contrivance for determining compliance with OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) The hourly and annual PE emission limitations are based on the emissions unit's potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with these limits.

B. **Operational Restrictions**

- 1. None

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

- 1. The permittee shall maintain records of the following information for the coating line:
  - a. the MSDS sheets for each coating and cleanup material currently employed;
  - b. documentation as to whether or not each coating and cleanup material is a photochemically reactive material, as applied; and,
  - c. when a new coating or cleanup material is going to be employed in the coating line, the permittee shall determine and document prior to employing the new coating or cleanup material whether or not it is a photochemically reactive material, as applied.
- 2. If it is determined that a photochemically reactive material is being employed in the coating line, the permittee shall collect and record the following information for each day for the coating line:
  - a. the company identification for each coating and cleanup material employed;
  - b. documentation of whether each coating or cleanup material employed is a photochemically reactive material, as applied;
  - c. the number of gallons of each coating and photochemically reactive cleanup material employed;
  - d. the OC content of each coating and photochemically reactive cleanup material, as applied, in pounds per gallon;
  - e. for each day during which a photochemically reactive material is employed, the total OC emission rate for all coatings and photochemically reactive cleanup materials, in pounds per day;
  - f. for each day during which a photochemically reactive material is employed, the total number of hours the emissions unit was in operation; and,
  - g. for each day during which a photochemically reactive material is employed, the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, ( i.e., (e)/(f)), in pounds per hour (average).

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]
- 3. The permittee shall collect and record the following information for each day for the coating line:
  - a. the name and identification number of each coating and thinner employed;
  - b. the OC content of each coating and thinner, in pounds per gallon;
  - c. the number of gallons of each coating and thinner employed;
  - d. the total OC emissions from all coatings and thinners, in pounds per day (i.e., the sum of (b) times (c) for each coating and thinner).
- 4. The permittee shall collect and record the following information each month for the coating line:
  - a. the name and identification of each cleanup material employed;
  - b. the OC content of each cleanup material, in pounds per gallon;
  - c. the number of gallons of each cleanup material employed;
  - d. the total OC emissions from all cleanup materials, in tons per month (i.e., the sum of (b) times (c) for each

cleanup material, then divided by 2000);

- e. the total OC emissions from all coatings and thinners, in tons per month (i.e., the sum of the daily OC emissions in section C.3.d, then divided by 2000);
  - f. the total OC emissions from all coatings, thinners, and cleanup materials, in tons per month (i.e., (d) plus (e)).
5. The emissions unit shall be operated and maintained in accordance with manufacturer's recommendations. The emissions unit's exhaust filters shall be maintained (changed or cleaned) regularly per manufacturer's recommendations in order to maintain the highest effective level of particulate emissions control. Maintenance of exhaust filters (cleaning and/or changing of filter elements) shall be recorded in an operations log maintained at this facility.
6. The permit to install for this emissions unit (R001) 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: ethanol

TLV (mg/m3): 1880

Maximum Hourly Emission Rate (lbs/hr): 0.81\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 42.49

MAGLC (ug/m3): 44,761.9

Pollutant: 1-butanol

TLV (mg/m3): 60.6

Maximum Hourly Emission Rate (lbs/hr): 1.25\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 65.77

MAGLC (ug/m3): 1442.9

Pollutant: acetone

TLV (mg/m3): 1186.6

Maximum Hourly Emission Rate (lbs/hr): 0.53\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.91

MAGLC (ug/m3): 28,252.4

Pollutant: ethyl acetate

TLV (mg/m3): 1440

Maximum Hourly Emission Rate (lbs/hr): 1.2\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 63.11

MAGLC (ug/m3): 34,285.7

Pollutant: n-butyl acetate

TLV (mg/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 3.84\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 201.94

MAGLC (ug/m3): 16,976.2

\*Combined maximum emission rate for R001, R002, and R003.

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of

new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

7. 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.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which include the following information:

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

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

2. The permittee shall submit deviation (excursion) reports which include an identification of each day during which the daily OC emissions exceeded 47.3 pounds per day, and the actual daily OC emissions for each such day.

3. The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions.

4. The permittee shall also submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

the permittee shall not discharge more than 40 pounds of organic material into the atmosphere in any one day, nor more than 8 pounds of organic material in any one hour

Applicable Compliance Method

Compliance with the hourly and daily emission limitations shall be demonstrated based on daily record keeping requirements specified by section C.2 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings and photochemically reactive cleanup materials.

Emission Limitation

47.3 pounds of OC per day for coatings

Applicable Compliance Method

Compliance with the daily emission limitation shall be demonstrated based on daily record keeping requirements specified in section C.3 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings.

Emission Limitation

9.12 tons of OC per year for coatings and cleanup materials

Applicable Compliance Method

Compliance with the annual emission limitation shall be demonstrated based on monthly record keeping requirements specified in section C.4 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings and cleanup materials.

Emission Limitation

0.1 pound of PE per hour

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined using the following equation:

$E = \text{maximum coating solids usage rate in pounds per hour} \times (1-TE) \times (1-CE)$

E = particulate emissions rate (pounds per hour)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = fractional control efficiency of the control equipment  
Emission Limitation

0.44 ton of PE per year

Applicable Compliance Method:

Compliance with the annual emission limitation shall be determined by multiplying the allowable hourly emission limitation by 8760 hours per year, then divide by 2000 pounds per ton.  
Emission Limitation

Visible particulate emissions from any stack shall not exceed five percent opacity, as a six-minute average

Applicable Compliance Method

OAC rule 3745-17-03(B)(1)

**F. Miscellaneous Requirements**

1. None

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**Facility ID: 1677130078 Emissions Unit ID: R002 Issuance type: Final State Permit To Operate**

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**Part II - Special Terms and Conditions**

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R002 - Global Finishing Solutions Model Number Pyramid CF Spray Booth - Paint Spray Booth 1.	OAC rule 3745-31-05(A)(3) (PTI 16-02358)	118.3 pounds of organic compounds (OC) per day for coatings
		22.32 tons of OC per year for coatings and cleanup materials
		0.1 pound of particulate emissions (PE) per hour
		0.44 ton of PE per year
		Visible particulate emissions from any stack shall not exceed five percent opacity, as a six-minute average.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-21-07(G)(4).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less

OAC rule 3745-17-11

stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-21-07(G)(2)

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

OAC rule 3745-21-07(G)(4)

When employing, applying, evaporating, or drying any photochemically reactive material, or substance containing such photochemically reactive material, the permittee shall not discharge more than 40 pounds of organic material into the atmosphere in any one day, nor more than 8 pounds of organic material in any one hour.

Emissions of organic material to the atmosphere from the cleanup with photochemically reactive materials of any article, machine, equipment, or other contrivance, shall be included with the other emissions of organic materials from that article, machine, equipment, or other contrivance for determining compliance with OAC rule 3745-21-07(G)(2).

**2. Additional Terms and Conditions**

- (a) The hourly and annual PE emission limitations are based on the emissions unit's potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with these limits.

**B. Operational Restrictions**

- 1. None

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

- 1. The permittee shall maintain records of the following information for the coating line:
  - a. the MSDS sheets for each coating and cleanup material currently employed;
  - b. documentation as to whether or not each coating and cleanup material is a photochemically reactive material, as applied; and,
  - c. when a new coating or cleanup material is going to be employed in the coating line, the permittee shall determine and document prior to employing the new coating or cleanup material whether or not it is a photochemically reactive material, as applied.
- 2. If it is determined that a photochemically reactive material is being employed in the coating line, the permittee shall collect and record the following information for each day for the coating line:
  - a. the company identification for each coating and cleanup material employed;
  - b. documentation of whether each coating or cleanup material employed is a photochemically reactive material, as applied;
  - c. the number of gallons of each coating and photochemically reactive cleanup material employed;
  - d. the OC content of each coating and photochemically reactive cleanup material, as applied, in pounds per gallon;
  - e. for each day during which a photochemically reactive material is employed, the total OC emission rate for all coatings and photochemically reactive cleanup materials, in pounds per day;
  - f. for each day during which a photochemically reactive material is employed, the total number of hours the emissions unit was in operation; and,
  - g. for each day during which a photochemically reactive material is employed, the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, ( i.e., (e)/(f)), in pounds per hour (average).

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]
- 3. The permittee shall collect and record the following information for each day for the coating line:
  - a. the name and identification number of each coating and thinner employed;
  - b. the OC content of each coating and thinner, in pounds per gallon;
  - c. the number of gallons of each coating and thinner employed;
  - d. the total OC emissions from all coatings and thinners, in pounds per day (i.e., the sum of (b) times (c) for each coating and thinner).
- 4. The permittee shall collect and record the following information each month for the coating line:
  - a. the name and identification of each cleanup material employed;
  - b. the OC content of each cleanup material, in pounds per gallon;
  - c. the number of gallons of each cleanup material employed;
  - d. the total OC emissions from all cleanup materials, in tons per month (i.e., the sum of (b) times (c) for each

cleanup material, then divided by 2000);

- e. the total OC emissions from all coatings and thinners, in tons per month (i.e., the sum of the daily OC emissions in section C.3.d, then divided by 2000);
  - f. the total OC emissions from all coatings, thinners, and cleanup materials, in tons per month (i.e., (d) plus (e)).
5. The emissions unit shall be operated and maintained in accordance with manufacturer's recommendations. The emissions unit's exhaust filters shall be maintained (changed or cleaned) regularly per manufacturer's recommendations in order to maintain the highest effective level of particulate emissions control. Maintenance of exhaust filters (cleaning and/or changing of filter elements) shall be recorded in an operations log maintained at this facility.
6. The permit to install for this emissions unit (R002) 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: ethanol

TLV (mg/m3): 1880

Maximum Hourly Emission Rate (lbs/hr): 0.81\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 42.49

MAGLC (ug/m3): 44,761.9

Pollutant: 1-butanol

TLV (mg/m3): 60.6

Maximum Hourly Emission Rate (lbs/hr): 1.25\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 65.77

MAGLC (ug/m3): 1442.9

Pollutant: acetone

TLV (mg/m3): 1186.6

Maximum Hourly Emission Rate (lbs/hr): 0.53\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.91

MAGLC (ug/m3): 28,252.4

Pollutant: ethyl acetate

TLV (mg/m3): 1440

Maximum Hourly Emission Rate (lbs/hr): 1.2\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 63.11

MAGLC (ug/m3): 34,285.7

Pollutant: n-butyl acetate

TLV (mg/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 3.84\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 201.94

MAGLC (ug/m3): 16,976.2

\*Combined maximum emission rate for R001, R002, and R003.

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of

new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

7. 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.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which include the following information:

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

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

2. The permittee shall submit deviation (excursion) reports which include an identification of each day during which the daily OC emissions exceeded 118.3 pounds per day, and the actual daily OC emissions for each such day.

3. The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions.

4. The permittee shall also submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

the permittee shall not discharge more than 40 pounds of organic material into the atmosphere in any one day, nor more than 8 pounds of organic material in any one hour

Applicable Compliance Method

Compliance with the hourly and daily emission limitations shall be demonstrated based on daily record keeping requirements specified by section C.2 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings and photochemically reactive cleanup materials.

Emission Limitation

118.3 pounds of OC per day for coatings

Applicable Compliance Method

Compliance with the daily emission limitation shall be demonstrated based on daily record keeping requirements specified in section C.3 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings.

Emission Limitation

22.32 tons of OC per year for coatings and cleanup materials

Applicable Compliance Method

Compliance with the annual emission limitation shall be demonstrated based on monthly record keeping requirements specified in section C.4 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings and cleanup materials.

Emission Limitation

0.1 pound of PE per hour

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined using the following equation:

$E = \text{maximum coating solids usage rate in pounds per hour} \times (1-TE) \times (1-CE)$

E = particulate emissions rate (pounds per hour)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = fractional control efficiency of the control equipment  
Emission Limitation

0.44 ton of PE per year

Applicable Compliance Method:

Compliance with the annual emission limitation shall be determined by multiplying the allowable hourly emission limitation by 8760 hours per year, then divide by 2000 pounds per ton.  
Emission Limitation

Visible particulate emissions from any stack shall not exceed five percent opacity, as a six-minute average

Applicable Compliance Method

OAC rule 3745-17-03(B)(1)

**F. Miscellaneous Requirements**

- 1. None

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

Facility ID: 1677130078 Emissions Unit ID: R003 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R003 - Global Finishing Solutions Model Number Pyramid CF Spray Booth - Paint Spray Booth 2.	OAC rule 3745-31-05(A)(3) (PTI 16-02358)	118.3 pounds of organic compounds (OC) per day for coatings
		22.32 tons of OC per year for coatings and cleanup materials
		0.1 pound of particulate emissions (PE) per hour
		0.44 ton of PE per year
		Visible particulate emissions from any stack shall not exceed five percent opacity, as a six-minute average.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-21-07(G)(4).
	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less

OAC rule 3745-17-11

stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-21-07(G)(2)

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

OAC rule 3745-21-07(G)(4)

When employing, applying, evaporating, or drying any photochemically reactive material, or substance containing such photochemically reactive material, the permittee shall not discharge more than 40 pounds of organic material into the atmosphere in any one day, nor more than 8 pounds of organic material in any one hour.

Emissions of organic material to the atmosphere from the cleanup with photochemically reactive materials of any article, machine, equipment, or other contrivance, shall be included with the other emissions of organic materials from that article, machine, equipment, or other contrivance for determining compliance with OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (b) The hourly and annual PE emission limitations are based on the emissions unit's potential to emit. Therefore, no record keeping or reporting is required to demonstrate compliance with these limits.

B. **Operational Restrictions**

- 1. None

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

- 1. 1. The permittee shall maintain records of the following information for the coating line:
  - a. the MSDS sheets for each coating and cleanup material currently employed;
  - b. documentation as to whether or not each coating and cleanup material is a photochemically reactive material, as applied; and,
  - c. when a new coating or cleanup material is going to be employed in the coating line, the permittee shall determine and document prior to employing the new coating or cleanup material whether or not it is a photochemically reactive material, as applied.
- 2. If it is determined that a photochemically reactive material is being employed in the coating line, the permittee shall collect and record the following information for each day for the coating line:
  - a. the company identification for each coating and cleanup material employed;
  - b. documentation of whether each coating or cleanup material employed is a photochemically reactive material, as applied;
  - c. the number of gallons of each coating and photochemically reactive cleanup material employed;
  - d. the OC content of each coating and photochemically reactive cleanup material, as applied, in pounds per gallon;
  - e. for each day during which a photochemically reactive material is employed, the total OC emission rate for all coatings and photochemically reactive cleanup materials, in pounds per day;
  - f. for each day during which a photochemically reactive material is employed, the total number of hours the emissions unit was in operation; and,
  - g. for each day during which a photochemically reactive material is employed, the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, ( i.e., (e)/(f)), in pounds per hour (average).

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]
- 3. The permittee shall collect and record the following information for each day for the coating line:
  - a. the name and identification number of each coating and thinner employed;
  - b. the OC content of each coating and thinner, in pounds per gallon;
  - c. the number of gallons of each coating and thinner employed;
  - d. the total OC emissions from all coatings and thinners, in pounds per day (i.e., the sum of (b) times (c) for each coating and thinner).
- 4. The permittee shall collect and record the following information each month for the coating line:
  - a. the name and identification of each cleanup material employed;
  - b. the OC content of each cleanup material, in pounds per gallon;
  - c. the number of gallons of each cleanup material employed;
  - d. the total OC emissions from all cleanup materials, in tons per month (i.e., the sum of (b) times (c) for each

cleanup material, then divided by 2000);

- e. the total OC emissions from all coatings and thinners, in tons per month (i.e., the sum of the daily OC emissions in section C.3.d, then divided by 2000);
  - f. the total OC emissions from all coatings, thinners, and cleanup materials, in tons per month (i.e., (d) plus (e)).
5. The emissions unit shall be operated and maintained in accordance with manufacturer's recommendations. The emissions unit's exhaust filters shall be maintained (changed or cleaned) regularly per manufacturer's recommendations in order to maintain the highest effective level of particulate emissions control. Maintenance of exhaust filters (cleaning and/or changing of filter elements) shall be recorded in an operations log maintained at this facility.
6. The permit to install for this emissions unit (R003) 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: ethanol

TLV (mg/m3): 1880

Maximum Hourly Emission Rate (lbs/hr): 0.81\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 42.49

MAGLC (ug/m3): 44,761.9

Pollutant: 1-butanol

TLV (mg/m3): 60.6

Maximum Hourly Emission Rate (lbs/hr): 1.25\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 65.77

MAGLC (ug/m3): 1442.9

Pollutant: acetone

TLV (mg/m3): 1186.6

Maximum Hourly Emission Rate (lbs/hr): 0.53\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 27.91

MAGLC (ug/m3): 28,252.4

Pollutant: ethyl acetate

TLV (mg/m3): 1440

Maximum Hourly Emission Rate (lbs/hr): 1.2\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 63.11

MAGLC (ug/m3): 34,285.7

Pollutant: n-butyl acetate

TLV (mg/m3): 713

Maximum Hourly Emission Rate (lbs/hr): 3.84\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 201.94

MAGLC (ug/m3): 16,976.2

\*Combined maximum emission rate for R001, R002, and R003.

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of

new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

7. 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.

**D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which include the following information:

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

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

2. The permittee shall submit deviation (excursion) reports which include an identification of each day during which the daily OC emissions exceeded 118.3 pounds per day, and the actual daily OC emissions for each such day.

3. The deviation reports shall be submitted in accordance with the requirements specified in the General Terms and Conditions.

4. The permittee shall also submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

the permittee shall not discharge more than 40 pounds of organic material into the atmosphere in any one day, nor more than 8 pounds of organic material in any one hour

Applicable Compliance Method

Compliance with the hourly and daily emission limitations shall be demonstrated based on daily record keeping requirements specified by section C.2 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings and photochemically reactive cleanup materials.

Emission Limitation

118.3 pounds of OC per day for coatings

Applicable Compliance Method

Compliance with the daily emission limitation shall be demonstrated based on daily record keeping requirements specified in section C.3 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings.

Emission Limitation

22.32 tons of OC per year for coatings and cleanup materials

Applicable Compliance Method

Compliance with the annual emission limitation shall be demonstrated based on monthly record keeping requirements specified in section C.4 of these terms and conditions. Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the organic compound contents of the coatings and cleanup materials.

Emission Limitation

0.1 pound of PE per hour

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined using the following equation:

$E = \text{maximum coating solids usage rate in pounds per hour} \times (1-TE) \times (1-CE)$

E = particulate emissions rate (pounds per hour)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = fractional control efficiency of the control equipment  
Emission Limitation

0.44 ton of PE per year

Applicable Compliance Method:

Compliance with the annual emission limitation shall be determined by multiplying the allowable hourly emission limitation by 8760 hours per year, then divide by 2000 pounds per ton.  
Emission Limitation

Visible particulate emissions from any stack shall not exceed five percent opacity, as a six-minute average

Applicable Compliance Method

OAC rule 3745-17-03(B)(1)

F. **Miscellaneous Requirements**

1. None