

Facility ID: 0679000261 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 R001](#)  
[Go to Part II for Emissions Unit R002](#)  
[Go to Part II for Emissions Unit R003](#)

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Facility ID: 0679000261 Emissions Unit ID: R001 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>
booth 030 with associated flashoff and drying oven	OAC rule 3745-31-05(A)(3) PTI# 06-5118	Emissions of volatile organic compounds (VOC) from R004 shall not exceed 115.2 pounds per hour.
		Emissions of particulate matter from the spray booth shall not exceed 2.4 tons per year.
	OAC rule 3745-17-07(A)	See B.1. Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except for a period of 6 consecutive minutes in any 60 minutes. Visible particulate emissions shall not exceed 60 percent opacity, as a 6-minute average, at any time.
	OAC rule 3745-17-11(B)(2)	Emissions of particulate matter from the spray booth shall not exceed 0.551 pound per hour.
	OAC rule 3745-21-07(G)	None (See B.1 and B.2)
	OAC rule 3745-35-07(B)	Combined emissions from emissions units R001, R002, R003, R004, and R005 shall neither exceed 8.25 tons of VOC per month, nor 99.0 tons of VOC per year, nor 6.1 tons of all hazardous air pollutants (HAPs) as a 12-month rolling total.

**2. Additional Terms and Conditions**

- (a) The total quantity of HAP applied (emitted) from emissions units R001, R002, R003, R004, and R005 combined shall not exceed 6.1 tons per rolling, 12-month period.  
 The permittee shall comply with the rolling, 12-month HAP limitation and the associated monitoring and recordkeeping requirements immediately upon issuance of this permit, by use of data from the previous 12 months of operation.  
 The total quantity of VOC applied (emitted) from emissions units R001, R002, R003, R004, and R005 combined shall not exceed 8.25 tons per month.  
 The permittee shall employ an exhaust filtration system during any operation of this emissions unit.

**B. Operational Restrictions**

1. To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as coatings or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. This emissions unit is not subject to the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(1) because no baking or heat curing of the coating(s) occurs in the flashoff and drying oven.

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

1. The permittee shall collect and record the following information each month for R001, R002, R003, R004, and R005 combined:
  - The name and identification number of each coating, thinner, and cleanup material employed and a statement as to whether or not each is a "photochemically reactive material".
  - The VOC content of each coating, thinner, and cleanup material, in pounds per gallon.
  - The total HAP content of each coating, thinner, and cleanup material, in pounds per gallon.
  - The number of gallons of each coating, thinner, and cleanup material employed.
  - The total VOC emissions (VOC applied) from all coatings, thinners, and cleanup materials employed [the sum of (1.b times 1.d) for all coatings, thinners, and cleanup materials], in pounds or tons.
  - The total HAP emissions (HAP applied) from all coatings, thinners, and cleanup materials employed [the sum of (1.c times 1.d) for all coatings, thinners, and cleanup materials], in pounds or tons.
  - The rolling, 12-month summation of the total HAP emissions, in tons.
  
2. The permit to install for this emissions unit was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):
  - Pollutant: Xylene
    - TLV (ug/m3): 434,000
    - Maximum Hourly Emission Rate (lbs/hr): 27.0
    - Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 3352
    - Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 10333
  - Pollutant: Toluene
    - TLV (ug/m3): 188,000
    - Maximum Hourly Emission Rate (lbs/hr): 8.8
    - Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 1095
    - Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 4476
  - Pollutant: Ethylbenzene
    - TLV (ug/m3): 434,000
    - Maximum Hourly Emission Rate (lbs/hr): 5.4
    - Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 672
    - Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 10333
  - Pollutant: Isopropylbenzene (cumene)
    - TLV (ug/m3): 246,000
    - Maximum Hourly Emission Rate (lbs/hr): 0.6
    - Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 573
    - Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 5857
  - Pollutant: 2-butoxyethanol
    - TLV (ug/m3): 121,000
    - Maximum Hourly Emission Rate (lbs/hr): 0.6
    - Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 573
    - Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 2881
  
3. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs, Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices";
  - 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.).
  
4. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.
 

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of the 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 quarterly reports which include the following information:  
the total VOC emissions from the coatings, thinners, and cleanup materials employed in emissions units R001, R002, R003, R004, and R005 combined, in tons, for each calendar month; and  
the total HAPs emissions from the coatings, thinners, and cleanup materials employed in emissions units R001, R002, R003, R004, and R005 combined, in tons, for each calendar month and each rolling, 12-month period.  
  
These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include information for each month during the previous calendar quarter.
  2. The permittee shall submit deviation (excursion) reports that identify any periods of time when a photochemically reactive material was employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.
- E. Testing Requirements**
1. Compliance with the 115.2 pounds VOC per hour emission limit shall be demonstrated by multiplying the maximum number of gallons of coating that can theoretically be applied per hour in R001-R005 (based on the maximum design capacities of the booths) times the highest VOC content coating. No additional record keeping is necessary to demonstrate compliance with this limit because the limit cannot be exceeded under current conditions.
  2. Compliance with the air toxics requirements have been determined by modeling the maximum total combined emission rates for R001-R005 to determine the predicted 1-hour maximum ground-level concentration at the fence line. Therefore, the hourly emission rates can not be exceeded under current conditions. As required above and by OAC rule 3745-31-02, any change in the coatings used or in the operation of the emissions units which would increase the emission rate of any individual air toxic would require a new permit to install.
  3. Compliance with the monthly and rolling, 12-month emission limitations and usage restrictions above for VOC and HAP shall be determined in accordance with the following method:  
  
Formulation data or USEPA Method 24 shall be used to determine the VOC content of the coatings, thinners, and cleanup materials. Formulation data shall be used to determine the HAP and individual air toxics contents of the coatings, thinners, and cleanup materials. The VOC and HAP emission rates and usage restrictions for each coating, thinner, and cleanup material shall be calculated by multiplying the volume of material employed by the appropriate VOC or HAP content determined for that material. The VOC and total HAP emission rates and usage rates for each month shall be calculated by adding the emission rates and usage rates for all coatings, thinners, and cleanup materials employed during the month. The rolling, 12-month summations for total HAPs shall be calculated each month by adding the HAP emission rate for that month to the HAP emission rate for the previous 11 calendar months (this same method shall be used to calculate rolling, 12-month usage).
  4. Compliance with the visible particulate emission limit shall be determined in accordance with OAC rule 3745-17-03.
  5. Compliance with the particulate matter emission limit of 0.551 pound per hour shall be determined based on emission testing conducted in accordance with OAC rule 3745-17-03. Emission testing is not specifically required to demonstrate compliance with this emission limit, but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).
  6. Compliance with the annual particulate matter emission limit shall be determined by multiplying the tested particulate matter emission rate, in pound(s) per hour, or the allowable particulate matter emission rate of 0.551 pound per hour, by the actual hours of operation per year.
- F. Miscellaneous Requirements**
1. Pursuant to OAC rule 3745-35-07, the following terms and conditions of this permit are federally enforceable: A - F.

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

Facility ID: 0679000261 Emissions Unit ID: R002 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>
booth 030 with associated flashoff and drying oven	OAC rule 3745-31-05(A)(3) PTI# 06-5118	Emissions of volatile organic compounds (VOC) from R004 shall not exceed 115.2 pounds per hour.  Emissions of particulate matter from the spray booth shall not exceed 2.4 tons per year.
	OAC rule 3745-17-07(A)	See B.1. Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except for a period of 6 consecutive minutes in any 60 minutes. Visible particulate emissions shall not exceed 60 percent opacity, as a 6-minute average, at any time.
	OAC rule 3745-17-11(B)(2)	Emissions of particulate matter from the spray booth shall not exceed 0.551 pound per hour.
	OAC rule 3745-21-07(G) OAC rule 3745-35-07(B)	None (See B.1 and B.2) Combined emissions from emissions units R001, R002, R003, R004, and R005 shall neither exceed 8.25 tons of VOC per month, nor 99.0 tons of VOC per year, nor 6.1 tons of all hazardous air pollutants (HAPs) as a 12-month rolling total.

**2. Additional Terms and Conditions**

(a) The total quantity of HAP applied (emitted) from emissions units R001, R002, R003, R004, and R005 combined shall not exceed 6.1 tons per rolling, 12-month period.  
The permittee shall comply with the rolling, 12-month HAP limitation and the associated monitoring and recordkeeping requirements immediately upon issuance of this permit, by use of data from the previous 12 months of operation.  
The total quantity of VOC applied (emitted) from emissions units R001, R002, R003, R004, and R005 combined shall not exceed 8.25 tons per month.  
The permittee shall employ an exhaust filtration system during any operation of this emissions unit.

**B. Operational Restrictions**

1. To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as coatings or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. This emissions unit is not subject to the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(1) because no baking or heat curing of the coating(s) occurs in the flashoff and drying oven.

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

1. The permittee shall collect and record the following information each month for R001, R002, R003, R004, and R005 combined:  
The name and identification number of each coating, thinner, and cleanup material employed and a statement as to whether or not each is a "photochemically reactive material".  
The VOC content of each coating, thinner, and cleanup material, in pounds per gallon.  
The total HAP content of each coating, thinner, and cleanup material, in pounds per gallon.  
The number of gallons of each coating, thinner, and cleanup material employed.  
The total VOC emissions (VOC applied) from all coatings, thinners, and cleanup materials employed [the sum of (1.b times 1.d) for all coatings, thinners, and cleanup materials], in pounds or tons.  
The total HAP emissions (HAP applied) from all coatings, thinners, and cleanup materials employed [the sum of (1.c times 1.d) for all coatings, thinners, and cleanup materials], in pounds or tons.  
The rolling, 12-month summation of the total HAP emissions, in tons.

2. The permit to install for this emissions unit was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):  
Pollutant: Xylene

TLV (ug/m3): 434,000  
Maximum Hourly Emission Rate (lbs/hr): 27.0  
Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 3352  
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 10333

Pollutant: Toluene

TLV (ug/m3): 188,000  
 Maximum Hourly Emission Rate (lbs/hr): 8.8  
 Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 1095  
 Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 4476

Pollutant: Ethylbenzene

TLV (ug/m3): 434,000  
 Maximum Hourly Emission Rate (lbs/hr): 5.4  
 Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 672  
 Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 10333

Pollutant: Isopropylbenzene (cumene)

TLV (ug/m3): 246,000  
 Maximum Hourly Emission Rate (lbs/hr): 0.6  
 Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 573  
 Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 5857

Pollutant: 2-butoxyethanol

TLV (ug/m3): 121,000  
 Maximum Hourly Emission Rate (lbs/hr): 0.6  
 Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 573  
 Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 2881

3. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs, Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices";
- 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.).

4. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of the 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 quarterly reports which include the following information:  
 the total VOC emissions from the coatings, thinners, and cleanup materials employed in emissions units R001, R002, R003, R004, and R005 combined, in tons, for each calendar month; and  
 the total HAPs emissions from the coatings, thinners, and cleanup materials employed in emissions units R001, R002, R003, R004, and R005 combined, in tons, for each calendar month and each rolling, 12-month period.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include information for each month during the previous calendar quarter.

2. The permittee shall submit deviation (excursion) reports that identify any periods of time when a photochemically reactive material was employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

**E. Testing Requirements**

1. Compliance with the 115.2 pounds VOC per hour emission limit shall be demonstrated by multiplying the maximum number of gallons of coating that can theoretically be applied per hour in R001-R005 (based on the maximum design capacities of the booths) times the highest VOC content coating. No additional record keeping is necessary to demonstrate compliance with this limit because the limit cannot be exceeded under current

conditions.

2. Compliance with the air toxics requirements have been determined by modeling the maximum total combined emission rates for R001-R005 to determine the predicted 1-hour maximum ground-level concentration at the fence-line. Therefore, the hourly emission rates can not be exceeded under current conditions. As required above and by OAC rule 3745-31-02, any change in the coatings used or in the operation of the emissions units which would increase the emission rate of any individual air toxic would require a new permit to install.
  3. Compliance with the monthly and rolling, 12-month emission limitations and usage restrictions above for VOC and HAP shall be determined in accordance with the following method:  
  
 Formulation data or USEPA Method 24 shall be used to determine the VOC content of the coatings, thinners, and cleanup materials. Formulation data shall be used to determine the HAP and individual air toxics contents of the coatings, thinners, and cleanup materials. The VOC and HAP emission rates and usage restrictions for each coating, thinner, and cleanup material shall be calculated by multiplying the volume of material employed by the appropriate VOC or HAP content determined for that material. The VOC and total HAP emission rates and usage rates for each month shall be calculated by adding the emission rates and usage rates for all coatings, thinners, and cleanup materials employed during the month. The rolling, 12-month summations for total HAPs shall be calculated each month by adding the HAP emission rate for that month to the HAP emission rate for the previous 11 calendar months (this same method shall be used to calculate rolling, 12-month usage).
  4. Compliance with the visible particulate emission limit shall be determined in accordance with OAC rule 3745-17-03.
  5. Compliance with the particulate matter emission limit of 0.551 pound per hour shall be determined based on emission testing conducted in accordance with OAC rule 3745-17-03. Emission testing is not specifically required to demonstrate compliance with this emission limit, but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).
  6. Compliance with the annual particulate matter emission limit shall be determined by multiplying the tested particulate matter emission rate, in pound(s) per hour, or the allowable particulate matter emission rate of 0.551 pound per hour, by the actual hours of operation per year.
- F. Miscellaneous Requirements**
1. Pursuant to OAC rule 3745-35-07, the following terms and conditions of this permit are federally enforceable: A - F.

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Facility ID: 0679000261 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>
booth 030 with associated flashoff and drying oven	OAC rule 3745-31-05(A)(3) PTI# 06-5118	Emissions of volatile organic compounds (VOC) from R004 shall not exceed 115.2 pounds per hour.
		Emissions of particulate matter from the spray booth shall not exceed 2.4 tons per year.
		See B.1.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a 6-minute average, except for a period of 6 consecutive minutes in any 60 minutes. Visible particulate emissions shall not exceed 60 percent opacity, as a 6-minute average, at any time.
	OAC rule 3745-17-11(B)(2)	Emissions of particulate matter from the spray booth

OAC rule 3745-21-07(G)

OAC rule 3745-35-07(B)

shall not exceed 0.551 pound per hour.

None (See B.1 and B.2)

Combined emissions from emissions units R001, R002, R003, R004, and R005 shall neither exceed 8.25 tons of VOC per month, nor 99.0 tons of VOC per year, nor 6.1 tons of all hazardous air pollutants (HAPs) as a 12-month rolling total.

**2. Additional Terms and Conditions**

- (a) The total quantity of HAP applied (emitted) from emissions units R001, R002, R003, R004, and R005 combined shall not exceed 6.1 tons per rolling, 12-month period.  
The permittee shall comply with the rolling, 12-month HAP limitation and the associated monitoring and recordkeeping requirements immediately upon issuance of this permit, by use of data from the previous 12 months of operation.  
The total quantity of VOC applied (emitted) from emissions units R001, R002, R003, R004, and R005 combined shall not exceed 8.25 tons per month.  
The permittee shall employ an exhaust filtration system during any operation of this emissions unit.

**B. Operational Restrictions**

1. To avoid the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(2), no photochemically reactive materials (i.e., as coatings or cleanup materials) shall be employed in this emissions unit.

Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).

2. This emissions unit is not subject to the emission limitations/control requirements contained in OAC rule 3745-21-07(G)(1) because no baking or heat curing of the coating(s) occurs in the flashoff and drying oven.

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

1. The permittee shall collect and record the following information each month for R001, R002, R003, R004, and R005 combined:

The name and identification number of each coating, thinner, and cleanup material employed and a statement as to whether or not each is a "photochemically reactive material".  
The VOC content of each coating, thinner, and cleanup material, in pounds per gallon.  
The total HAP content of each coating, thinner, and cleanup material, in pounds per gallon.  
The number of gallons of each coating, thinner, and cleanup material employed.  
The total VOC emissions (VOC applied) from all coatings, thinners, and cleanup materials employed [the sum of (1.b times 1.d) for all coatings, thinners, and cleanup materials], in pounds or tons.  
The total HAP emissions (HAP applied) from all coatings, thinners, and cleanup materials employed [the sum of (1.c times 1.d) for all coatings, thinners, and cleanup materials], in pounds or tons.  
The rolling, 12-month summation of the total HAP emissions, in tons.

2. The permit to install for this emissions unit was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Xylene

TLV (ug/m3): 434,000  
Maximum Hourly Emission Rate (lbs/hr): 27.0  
Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 3352  
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 10333

Pollutant: Toluene

TLV (ug/m3): 188,000  
Maximum Hourly Emission Rate (lbs/hr): 8.8  
Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 1095  
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 4476

Pollutant: Ethylbenzene

TLV (ug/m3): 434,000  
Maximum Hourly Emission Rate (lbs/hr): 5.4  
Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 672  
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 10333

Pollutant: Isopropylbenzene (cumene)

TLV (ug/m3): 246,000  
Maximum Hourly Emission Rate (lbs/hr): 0.6  
Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 573  
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 5857

Pollutant: 2-butoxyethanol

TLV (ug/m3): 121,000  
Maximum Hourly Emission Rate (lbs/hr): 0.6  
Predicted 1-Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 573

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 2881

3. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs, Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices";
  - 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.).
4. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of the 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 quarterly reports which include the following information:
  - the total VOC emissions from the coatings, thinners, and cleanup materials employed in emissions units R001, R002, R003, R004, and R005 combined, in tons, for each calendar month; and
  - the total HAPs emissions from the coatings, thinners, and cleanup materials employed in emissions units R001, R002, R003, R004, and R005 combined, in tons, for each calendar month and each rolling, 12-month period.

These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include information for each month during the previous calendar quarter.
2. The permittee shall submit deviation (excursion) reports that identify any periods of time when a photochemically reactive material was employed in this emissions unit. These reports shall be submitted within 30 days after the occurrence.

**E. Testing Requirements**

1. Compliance with the 115.2 pounds VOC per hour emission limit shall be demonstrated by multiplying the maximum number of gallons of coating that can theoretically be applied per hour in R001-R005 (based on the maximum design capacities of the booths) times the highest VOC content coating. No additional record keeping is necessary to demonstrate compliance with this limit because the limit cannot be exceeded under current conditions.
2. Compliance with the air toxics requirements have been determined by modeling the maximum total combined emission rates for R001-R005 to determine the predicted 1-hour maximum ground-level concentration at the fence line. Therefore, the hourly emission rates can not be exceeded under current conditions. As required above and by OAC rule 3745-31-02, any change in the coatings used or in the operation of the emissions units which would increase the emission rate of any individual air toxic would require a new permit to install.
3. Compliance with the monthly and rolling, 12-month emission limitations and usage restrictions above for VOC and HAP shall be determined in accordance with the following method:
 

Formulation data or USEPA Method 24 shall be used to determine the VOC content of the coatings, thinners, and cleanup materials. Formulation data shall be used to determine the HAP and individual air toxics contents of the coatings, thinners, and cleanup materials. The VOC and HAP emission rates and usage restrictions for each coating, thinner, and cleanup material shall be calculated by multiplying the volume of material employed by the appropriate VOC or HAP content determined for that material. The VOC and total HAP emission rates and usage rates for each month shall be calculated by adding the emission rates and usage rates for all coatings, thinners, and cleanup materials employed during the month. The rolling, 12-month summations for total HAPs shall be calculated each month by adding the HAP emission rate for that month to the HAP emission rate for the previous 11 calendar months (this same method shall be used to calculate rolling, 12-month usage).
4. Compliance with the visible particulate emission limit shall be determined in accordance with OAC rule 3745-17-03.
5. Compliance with the particulate matter emission limit of 0.551 pound per hour shall be determined based on emission testing conducted in accordance with OAC rule 3745-17-03. Emission testing is not specifically required to demonstrate compliance with this emission limit, but, if appropriate, may be requested pursuant to

OAC rule 3745-15-04(A).

6. Compliance with the annual particulate matter emission limit shall be determined by multiplying the tested particulate matter emission rate, in pound(s) per hour, or the allowable particulate matter emission rate of 0.551 pound per hour, by the actual hours of operation per year.

F. **Miscellaneous Requirements**

1. Pursuant to OAC rule 3745-35-07, the following terms and conditions of this permit are federally enforceable: A - F.