

Facility ID: 1413020501 Issuance type: Final State Permit To Operate

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

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

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

- [Go to Part II for Emissions Unit K001](#)
- [Go to Part II for Emissions Unit K002](#)
- [Go to Part II for Emissions Unit K003](#)

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

Facility ID: 1413020501 Emissions Unit ID: K001 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

**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>
K001-Miscellaneous metal parts paint spray booth 1 (Large booth)	OAC rule 3745-31-05(A)(3) PTI 14-05920	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.5 pounds per hour from coatings application.
	OAC rule 3745-31-05(C) (to avoid being subject to non-attainment new source review and Title V permitting requirements)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) and OAC rule 3745-21-09(U)(1)(c). The VOC emissions shall not exceed 20.72 tons per year (TPY), based on a rolling, 12-month summation, from coatings application and cleaning material usage (parts cleaning prior to coating and post-coating cleanup).
	OAC rule 3745-21-09(U)(1)(c)	See sections B.1 and B.2. The permittee shall not cause, allow or permit the discharge into the ambient air of any VOC from this emissions unit in excess of 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied, for an extreme performance coating.

**2. Additional Terms and Conditions**

- (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of coatings that comply with the requirements of OAC rule 3745-21-09(U)(1)(c), compliance with the short-term VOC emission limitations and VOC content limitation for cleaning material employed, and compliance with the rolling, 12-month coating and cleaning material usage limitations, and rolling, 12-month VOC emission limitation.  
The hourly emission limitation outlined in section A.1 is based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with this limitation.

**B. Operational Restrictions**

1. The maximum annual coating usage for this emissions unit shall not exceed 6240 gallons per year, excluding water and exempt solvents, as applied, based on a rolling, 12-month summation and the maximum annual cleaning material usage (as evaporated) for this emissions unit shall not exceed 2800 gallons per year, based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the coating or cleaning material usage levels, in gallons excluding water and exempt solvent, as applied, specified in the following table:

Months	Maximum Allowable Cumulative Coating Usage	Maximum Allowable Cumulative Solvent Usage

1 520 233

1-2 1040 467  
 1-3 1560 700  
 1-4 2080 933  
 1-5 2600 1167  
 1-6 3120 1400  
 1-7 3640 1633  
 1-8 4160 1867  
 1-9 4680 2100  
 1-10 5200 2333  
 1-11 5720 2567  
 1-12 6240 2800

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual coating and cleaning material usage limitations shall be based upon rolling, 12-month summations of the coating and cleaning material usage figures.

2. The VOC content, as applied, of each cleaning material employed shall not exceed 7.0 pounds of VOC per gallon.  
**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each month for this emissions unit:
  - a. The name and identification number of each coating and cleaning material employed;
  - b. The VOC content for each coating, in pounds of VOC per gallon of coating, excluding water and exempt solvents as applied;
  - c. The VOC content for each cleaning material, in pounds of VOC per gallon of cleaning material;
  - d. The number of gallons of each coating employed, excluding water and exempt solvents as applied;
  - e. The number of gallons of each cleaning material employed (as evaporated);
  - f. The total VOC emissions in pounds or tons [summation of, (b x d) for all coatings plus c x e) for all cleaning materials, and divided by 2,000 pounds per ton if the units are in pounds];
  - g. Beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the updated rolling, 12-month summation of the coating and cleaning material usage, in gallons. This shall include the information for the current month and the preceding eleven calendar months.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative coating and cleaning material usages for each calendar month; and

- h. Beginning during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit and continuing thereafter, the updated rolling, 12-month summation of the total VOC emissions, in tons. This shall include the information for the current month and the preceding calendar months for 12 calendar months as the time unit of measure is based upon a rolling, 12-month summation of the total VOC emissions, in tons.
2. The permit to install for emissions units K001 through K003 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust systems, 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 these emissions units 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 SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) 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: toluene  
 TLV (ug/m3): 188,400  
 Maximum Hourly Emission Rate (lbs/hr): 31.5 lbs/hr, K001 - K003, combined  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2025 for emissions units K001 - K003, combined  
 MAGLC (ug/m3): 4485

3. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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.).
- D. Reporting Requirements**

1. The permittee shall notify the director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such

record and shall be sent to the director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitations on coating usage and/or cleaning material usage; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative coating usage and/or cleaning material usage levels. If no exceedances occurred during the reporting period, the permittee shall state so in the report. These reports shall be submitted to the Hamilton County Department of Environmental Services in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month VOC emission limitation. If no exceedances occurred during the reporting period, the permittee shall state so in the report. These reports shall be submitted to the Hamilton County Department of Environmental Services in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
4. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services that describe any changes to this emissions unit which affect the air toxic modeling as outlined in C.3 above. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.
5. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

**Emission Limitation:**

The volatile organic compounds (VOC) emissions from this emissions unit shall not exceed 10.5 pounds per hour from coatings application.

**Applicable Compliance Method:**

In the application for air PTI 14-05920, submitted February 7, 2007, the permittee provided the basis for the calculation which was used to determine that the potential to emit for VOC, considering the use of compliant coatings pursuant to OAC rule 3745-21-09(U)(1)(c), is:

3.5 pounds of VOC/gallon coating, excluding water and exempt solvents, as applied, x 3 gallons coating applied/hour = 10.5 pounds per hour of VOC emissions.

**Emission Limitation:**

The VOC emissions shall not exceed 20.72 TPY, based on a rolling, 12-month summation, from coatings application and cleanup material usage.

**Applicable Compliance Method:**

In the application for PTI 14-05920, submitted February 7, 2007, the permittee provided the basis for the calculations which were used to determine that the potential to emit for VOC, considering the use of compliant coatings pursuant to OAC rule 3745-21-09(U)(1)(c) and considering the rolling, 12-month coating and cleaning material usage limitations is:

3.5 pounds of VOC/gallon coating, excluding water and exempt solvents, as applied, x 6240 gallons coating applied/rolling, 12-months x 1 Ton/2000 pounds = 10.92 TPY of VOC emissions;

1500 gallons cleaning material (evaporated) for parts cleaning prior to coating/rolling, 12-months;

1500 gallons cleaning material for post-coating cleanup/rolling, 12-months - (800 gallons solvent waste disposed/rolling, 12-months x 0.25 gal solvent/gal solvent waste) = 1300 gallons cleaning material (evaporated) for post-coating cleanup/rolling, 12-months; and

7.0 pounds of VOC/gallon cleaning material x 2800 gallons cleaning material (evaporated)/rolling, 12-months x 1 Ton/2000 pounds = 9.80 TPY of VOC emissions.

The summation of 10.92 TPY + 9.80 TPY = 20.72 TPY of VOC per rolling, 12-months.

Compliance with the TPY of VOC emission limitation shall be demonstrated by the record keeping requirements in section C.1.

In calculating the actual emissions, the permittee may take a 50% emission reduction credit for storing rags, used in parts cleaning prior to coating, in closed containers. Also, in calculating the actual emissions, the permittee may take credit for any volume of cleaning material solvent waste disposed of as outlined above.

**Emission Limitation:**

The permittee shall not cause, allow or permit the discharge into the ambient air of any VOC from this emissions unit in excess of 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied, for an extreme performance coating.

**Applicable Compliance Method:**

USEPA methods 24 and 24A shall be used to determine the VOC content for coatings. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

**d. Emission Limitation:**

The VOC content, as applied, of each cleanup material employed shall not exceed 7.0 pounds of VOC per gallon.

**Applicable Compliance Method:**

USEPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

- 2. Compliance with the usage limitations in section B.1 shall be demonstrated by the record keeping required in section C.1.

**F. Miscellaneous Requirements**

- 1. The following terms and conditions of this permit to install are federally enforceable: A, B, C.1, D.1, D.2, and E.

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

**Facility ID: 1413020501 Emissions Unit ID: K002 Issuance type: Final State Permit To Operate**

[Go to the top of this document](#)

**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>
K002-Miscellaneous metal parts paint spray booth 2 (Medium booth)	OAC rule 3745-31-05(A)(3) PTI 14-05920	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.5 pounds per hour from coatings application.
	OAC rule 3745-31-05(C) (to avoid being subject to Title V permitting requirements)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) and OAC rule 3745-21-09(U)(1)(c). The VOC emissions shall not exceed 20.72 tons per year (TPY), based on a rolling, 12-month summation, from coatings application and cleaning material usage (parts cleaning prior to coating and post-coating cleanup).
	OAC rule 3745-21-09(U)(1)(c)	See sections B.1 and B2. The permittee shall not cause, allow or permit the discharge into the ambient air of any VOC from this emissions unit in excess of 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied, for an extreme performance coating.

**2. Additional Terms and Conditions**

- (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of coatings that comply with the requirements of OAC rule 3745-21-09(U)(1)(c), compliance with the short-term VOC emission limitations and VOC content limitation for cleaning material employed, and compliance with the rolling, 12-month coating and cleaning material usage limitations, and rolling, 12-month VOC emission limitation.  
The hourly emission limitation outlined in section A.1 is based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with this limitation.

**B. Operational Restrictions**

- 1. The maximum annual coating usage for this emissions unit shall not exceed 6240 gallons per year, excluding water and exempt solvents, as applied, based on a rolling, 12-month summation and the maximum annual cleaning material usage (as evaporated) for this emissions unit shall not exceed 2800 gallons per year, based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the coating or cleaning material usage levels, in gallons excluding water and exempt solvent, as applied, specified in the following table:

Months	Maximum Allowable	Maximum Allowable

Cumulative Coating Usage	Cumulative Cleanup Usage
1 520 233	
1-2 1040 467	
1-3 1560 700	
1-4 2080 933	
1-5 2600 1167	
1-6 3120 1400	
1-7 3640 1633	
1-8 4160 1867	
1-9 4680 2100	
1-10 5200 2333	
1-11 5720 2567	
1-12 6240 2800	

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual coating and cleaning material usage limitations shall be based upon rolling, 12-month summations of the coating and cleaning material usage figures.

2. The VOC content, as applied, of each cleaning material employed shall not exceed 7.0 pounds of VOC per gallon.
- C. Monitoring and/or Record Keeping Requirements**
1. The permittee shall collect and record the following information each month for this emissions unit:
    - a. The name and identification number of each coating and cleaning material employed;
    - b. The VOC content for each coating, in pounds of VOC per gallon of coating, excluding water and exempt solvents as applied;
    - c. The VOC content for each cleaning material, in pounds of VOC per gallon of cleaning material;
    - d. The number of gallons of each coating employed, excluding water and exempt solvents as applied;
    - e. The number of gallons of each cleaning material employed (as evaporated);
    - f. The total VOC emissions in pounds or tons [summation of, (b x d) for all coatings plus c x e) for all cleaning materials, and divided by 2,000 pounds per ton if the units are in pounds];
    - g. Beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the updated rolling, 12-month summation of the coating and cleaning material usage, in gallons. This shall include the information for the current month and the preceding eleven calendar months.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative coating and cleaning material usages for each calendar month; and

    - h. Beginning during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit and continuing thereafter, the updated rolling, 12-month summation of the total VOC emissions, in tons. This shall include the information for the current month and the preceding calendar months for 12 calendar months as the time unit of measure is based upon a rolling, 12-month summation of the total VOC emissions, in tons.
  2. The permit to install for emissions units K001 through K003 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust systems, 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 these emissions units 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 SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) 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: toluene  
 TLV (ug/m3): 188,400  
 Maximum Hourly Emission Rate (lbs/hr): 31.5 lbs/hr, K001 - K003, combined  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2025 for emissions units K001 - K003, combined  
 MAGLC (ug/m3): 4485
  3. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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.).
- D. Reporting Requirements**
1. The permittee shall notify the director (the appropriate Ohio EPA District Office or local air agency) in writing of

any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitations on coating usage and/or cleaning material usage; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative coating usage and/or cleaning material usage levels. If no exceedances occurred during the reporting period, the permittee shall state so in the report. These reports shall be submitted to the Hamilton County Department of Environmental Services in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month VOC emissions limitation. If no exceedances occurred during the reporting period, the permittee shall state so in the report. These reports shall be submitted to the Hamilton County Department of Environmental Services in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
4. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services that describe any changes to this emissions unit which affect the air toxic modeling as outlined in C.3 above. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.
5. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

**Emission Limitation:**

The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.5 pounds per hour from coatings application.

**Applicable Compliance Method:**

In the application for PTI 14-05920, submitted February 7, 2007, the permittee provided the basis for the calculation which was used to determine that the potential to emit for VOC, considering the use of compliant coatings pursuant to OAC rule 3745-21-09(U)(1)(c), is:

3.5 pounds of VOC/gallon coating, excluding water and exempt solvents, as applied, x 3 gallons coating applied/hour = 10.5 pounds per hour of VOC emissions.

**Emission Limitation:**

The VOC emissions shall not exceed 20.72 tons per year (TPY), based on a rolling, 12-month summation, from coatings application and cleanup material usage.

**Applicable Compliance Method:**

In the application for PTI 14-05920, submitted February 7, 2007, the permittee provided the basis for the calculations which were used to determine that the potential to emit for VOC, considering the use of compliant coatings pursuant to OAC rule 3745-21-09(U)(1)(c) and considering the rolling, 12-month coating and cleaning material usage limitations is:

3.5 pounds of VOC/gallon coating, excluding water and exempt solvents, as applied, x 6240 gallons coating applied/rolling, 12-months x 1 Ton/2000 pounds = 10.92 TPY VOC emissions;

1500 gallons cleaning material (evaporated) for parts cleaning prior to coating/rolling, 12-months;

1500 gallons cleaning material for post-coating cleanup/rolling, 12-months - (800 gallons solvent waste disposed/rolling, 12-months x 0.25 gal solvent/gal solvent waste) = 1300 gallons cleaning material (evaporated) for post-coating cleanup/rolling, 12-months; and

7.0 pounds of VOC/gallon cleaning material x 2800 gallons cleaning material (evaporated)/rolling, 12-months x 1 Ton/2000 pounds = 9.80 TPY of VOC emissions.

The summation of 10.92 TPY + 9.80 TPY = 20.72 TPY of VOC per rolling, 12-months.

Compliance with the TPY VOC emission limitation shall be demonstrated by the record keeping requirements in section C.1.

In calculating the actual emissions, the permittee may take a 50% emission reduction credit for storing rags, used in parts cleaning prior to coating, in closed containers. Also, in calculating the actual emissions, the permittee may take credit for any volume of cleaning material solvent waste disposed of as outlined above.

**Emission Limitation:**

The permittee shall not cause, allow or permit the discharge into the ambient air of any VOC from this emissions unit in excess of 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied, for an extreme performance coating

**Applicable Compliance Method:**

USEPA methods 24 and 24A shall be used to determine the VOC content for coatings. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

**Emission Limitation:**

The VOC content, as applied, of each cleanup material employed shall not exceed 7.0 pounds of VOC per gallon.

**Applicable Compliance Method:**

USEPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

- 2. Compliance with the usage limitations in section B.1 shall be demonstrated by the record keeping required in section C.1.

**F. Miscellaneous Requirements**

- 1. The following terms and conditions of this permit to install are federally enforceable: A, B, C.1, D.1, D.2, D.3 and E.

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

Facility ID: 1413020501 Emissions Unit ID: K003 Issuance type: Final State Permit To Operate

[Go to the top of this document](#)

**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>
K003-Miscellaneous metal parts paint spray booth 3 (Small booth)	OAC rule 3745-31-05(A)(3) PTI 14-05920	The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.5 pounds per hour from coatings application.
	OAC rule 3745-31-05(C) (to avoid being subject to Title V permitting requirements)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C) and OAC rule 3745-21-09(U)(1)(c). The VOC emissions shall not exceed 20.72 tons per year (TPY), based on a rolling, 12-month summation, from coatings application and cleaning material usage (parts cleaning prior to coating and post-coating cleanup).
	OAC rule 3745-21-09(U)(1)(c)	See sections B.1 and B.2. The permittee shall not cause, allow or permit the discharge into the ambient air of any VOC from this emissions unit in excess of 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied, for an extreme performance coating.

**2. Additional Terms and Conditions**

- (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of coatings that comply with the requirements of OAC rule 3745-21-09(U)(1)(c), compliance with the short-term VOC emission limitations and the VOC content limitation for cleaning material employed, and compliance with the rolling, 12-month coating and cleaning material usage limitations, and rolling, 12-month VOC emission limitation.  
The hourly emission limitation outlined in section A.1 is based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with this limitation.

**B. Operational Restrictions**

- 1. The maximum annual coating usage for this emissions unit shall not exceed 6240 gallons per year, excluding water and exempt solvents, as applied, based on a rolling, 12-month summation and the maximum annual cleaning material usage (as evaporated) for this emissions unit shall not exceed 2800 gallons per year, based on a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the coating or cleaning material usage levels, in gallons excluding water and exempt solvent, as applied, specified in the following table:

Months	Maximum Allowable	Maximum Allowable

Cumulative Coating Usage	Cumulative Cleanup Usage
1 520 233	
1-2 1040 467	
1-3 1560 700	
1-4 2080 933	
1-5 2600 1167	
1-6 3120 1400	
1-7 3640 1633	
1-8 4160 1867	
1-9 4680 2100	
1-10 5200 2333	
1-11 5720 2567	
1-12 6240 2800	

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual coating and cleaning material usage limitations shall be based upon rolling, 12-month summations of the coating and cleaning material usage figures.

2. The VOC content, as applied, of each cleaning material employed shall not exceed 7.0 pounds of VOC per gallon.
- C. Monitoring and/or Record Keeping Requirements**
1. The permittee shall collect and record the following information each month for this emissions unit:
    - a. The name and identification number of each coating and cleaning material employed;
    - b. The VOC content for each coating, in pounds of VOC per gallon of coating, excluding water and exempt solvents as applied;
    - c. The VOC content for each cleaning material, in pounds of VOC per gallon of cleaning material;
    - d. The number of gallons of each coating employed, excluding water and exempt solvents as applied;
    - e. The number of gallons of each cleaning material employed (as evaporated);
    - f. The total VOC emissions in pounds or tons [summation of, (b x d) for all coatings plus c x e) for all cleaning materials, and divided by 2,000 pounds per ton if the units are in pounds];
    - g. Beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the updated rolling, 12-month summation of the coating and cleaning material usage, in gallons. This shall include the information for the current month and the preceding eleven calendar months.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative coating and cleaning material usages for each calendar month; and

    - h. Beginning during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit and continuing thereafter, the updated rolling, 12-month summation of the total VOC emissions, in tons. This shall include the information for the current month and the preceding calendar months for 12 calendar months as the time unit of measure is based upon a rolling, 12-month summation of the total VOC emissions, in tons.
  2. The permit to install for emissions units K001 through K003 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust systems, 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 these emissions units 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 SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) 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: toluene  
 TLV (ug/m3): 188,400  
 Maximum Hourly Emission Rate (lbs/hr): 31.5 lbs/hr, K001 - K003, combined  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2025 for emissions units K001 - K003, combined  
 MAGLC (ug/m3): 4485
  3. The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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.).
- D. Reporting Requirements**
1. The permittee shall notify the director (the appropriate Ohio EPA District Office or local air agency) in writing of

any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitations on coating usage and/or cleaning material usage; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative coating usage and/or cleaning material usage levels. If no exceedances occurred during the reporting period, the permittee shall state so in the report. These reports shall be submitted to the Hamilton County Department of Environmental Services in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month VOC emissions limitation. If no exceedances occurred during the reporting period, the permittee shall state so in the report. These reports shall be submitted to the Hamilton County Department of Environmental Services in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
4. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services that describe any changes to this emissions unit which affect the air toxic modeling as outlined in C.3. above. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.
5. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

**E. Testing Requirements**

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

**a. Emission Limitation:**

The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 10.5 pounds per hour from coatings application.

**Applicable Compliance Method:**

In the application for PTI 14-05920, submitted February 7, 2007, the permittee provided the basis for the calculation which was used to determine that the potential to emit for VOC, considering the use of compliant coatings pursuant to OAC rule 3745-21-09(U)(1)(c), is:

3.5 pounds of VOC/gallon coating, excluding water and exempt solvents, as applied, x 3 gallons coating applied/hour = 10.5 pounds per hour of VOC emissions

**Emission Limitation:**

The VOC emissions shall not exceed 20.72 tons per year (TPY), based on a rolling, 12-month summation, from coatings application and cleanup material usage.

**Applicable Compliance Method:**

In the application for PTI 14-05920, submitted February 7, 2007, the permittee provided the basis for the calculations which were used to determine that the potential to emit for VOC, considering the use of compliant coatings pursuant to OAC rule 3745-21-09(U)(1)(c) and considering the rolling, 12-month coating and cleaning material usage limitations is:

3.5 pounds of VOC/gallon coating, excluding water and exempt solvents, as applied, x 6240 gallons coating applied/rolling, 12-months x 1 Ton/2000 pounds = 10.92 TPY of VOC emissions;

1500 gallons cleaning material (evaporated) for parts cleaning prior to coating/rolling, 12-months;

1500 gallons cleaning material for post-coating cleanup/rolling, 12-months - (800 gallons solvent waste disposed/rolling, 12-months x 0.25 gal solvent/gal solvent waste) = 1300 gallons cleaning material (evaporated) for post-coating cleanup/rolling, 12-months; and

7.0 pounds VOC/gallon cleaning material x 2800 gallons cleaning material (evaporated)/rolling, 12-months x 1 Ton/2000 pounds = 9.80 TPY of VOC emissions.

The summation of 10.92 TPY + 9.80 TPY = 20.72 TPY of VOC per rolling, 12-months.

Compliance with the TPY VOC emissions limitation shall be demonstrated by the record keeping requirements in section C.1.

In calculating the actual emissions, the permittee may take a 50% emission reduction credit for storing rags, used in parts cleaning prior to coating, in closed containers. Also, in calculating the actual emissions, the permittee may take credit for any volume of cleaning material solvent waste disposed of as outlined above.

**Emission Limitation:**

The permittee shall not cause, allow or permit the discharge into the ambient air of any VOC from this emissions unit in excess of 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied, for an extreme performance coating

**Applicable Compliance Method:**

USEPA methods 24 and 24A shall be used to determine the VOC content for coatings. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

**Emission Limitation:**

The VOC content, as applied, of each cleanup material employed shall not exceed 7.0 pounds of VOC per gallon.

**Applicable Compliance Method:**

USEPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

2. Compliance with the usage limitations in section B.1 shall be demonstrated by the record keeping required in section C.1.

F. **Miscellaneous Requirements**

1. The following terms and conditions of this permit to install are federally enforceable: A, B, C.1, D.1, D.2, D.3 and E.