

Facility ID: 1652050029 Issuance type: Final State Permit To Operate

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

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

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

- [Go to Part II for Emissions Unit K001](#)
- [Go to Part II for Emissions Unit K002](#)
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Facility ID: 1652050029 Emissions Unit ID: K001 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K001 - Koehler Rubber spray booth - exhaust chamber A/Misc. Parts - miscellaneous metal parts coating line.	OAC rule 3745-21-09(U)(1)(d)	3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit

2. **Additional Terms and Conditions**
  - (a) None

**B. Operational Restrictions**

1. None

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

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

**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.

**E. Testing Requirements**

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

3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit

 Applicable Compliance Method:  

Compliance shall be based upon the record keeping requirements specified in Section C.3. In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 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.

**F. Miscellaneous Requirements**

1. None

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Facility ID: 1652050029 Emissions Unit ID: K002 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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

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

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
K002 - Company built spray booth - exhaust chamber B/Main Area - miscellaneous metal parts coating line.	OAC rule 3745-31-05(A)(3) (PTI 16-02451)	Volatile organic compound (VOC) emissions shall not exceed 58.8 pounds per day from coatings, and 12.42 tons per year from both coatings and cleanup materials*.  Particulate emissions (PE) shall not exceed 0.551 pounds per hour and 2.41 tons per year from coatings.  Visible particulate emissions from any stack serving this emissions unit shall not exceed ten percent opacity, as a six-minute average.  See Section B.1 below.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(d).  *Cleanup material emissions include emissions from cleaning the parts prior to coating application (i.e., manual wiping of parts) and emissions from cleaning the paint guns, booth walls, etc.
	OAC rule 3745-21-09(U)(1)(d)	3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	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) None

**B. Operational Restrictions**

1. The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation.

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

1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information each day for the coating line:
  - a. the name and identification number of each coating employed;
  - b. the VOC content of each coating, in pounds per gallon, as applied;

- c. the number of gallons of each coating, as applied; and
  - d. the daily VOC emissions from all the coatings employed, in pounds, [i.e., the sum of (b) times (c) for each coating employed].
3. The permittee shall collect and record the following information each month for the coating line:
- a. the name and identification number of each coating, as applied; and
  - b. the mass VOC per volume of each coating (excluding water and exempt solvents), as applied.
4. The permittee shall collect and record the following information each month for the coating line:
- a. the company identification of each cleanup material employed;
  - b. the number of gallons of each cleanup material employed;
  - c. the VOC content of each cleanup material employed, in pounds per gallon;
  - d. the total VOC emissions from all the cleanup materials employed, in pounds [i.e., the sum of (b) x (c) for each cleanup material employed];
  - e. the amount of cleanup material recovered, in pounds; and
  - f. the total monthly VOC emissions from cleanup operations, in pounds [i.e., (d) - (e)].
5. The permittee shall calculate and record the total annual VOC emissions from coatings and cleanup materials, [i.e., the sum of the daily VOC emission rates from the coating materials for the calendar year in Section C.2 plus the sum of the monthly emissions from cleanup materials for the calendar year in Section C.4].
6. The permit to install for this emissions unit K002 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: VM & P Naphtha  
 TLV (mg/m3): 1398  
 Maximum Hourly Emission Rate (lbs/hr): 5.0\*  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2911.3  
 MAGLC (ug/m3): 33,285.7
- Pollutant: Stoddard Solvent  
 TLV (mg/m3): 572  
 Maximum Hourly Emission Rate (lbs/hr): 0.54\*  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 315.43  
 MAGLC (ug/m3): 13,619
- Pollutant: Toluene  
 TLV (mg/m3): 188  
 Maximum Hourly Emission Rate (lbs/hr): 1.02\*  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 528.64  
 MAGLC (ug/m3): 4,476
- \*Combined emission rate for emissions units K002, K003, and K004.
7. 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.).
8. 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 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 notify the Director (appropriate District Office or local air agency) in writing of any record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (appropriate District Office or local air agency) within 30 days after the event occurs.
3. The permittee shall submit quarterly deviation reports that identify each day the VOC emissions exceeded the daily emission limit specified above.

The quarterly deviations reports shall be submitted to the Director (appropriate District Office or local air agency) in accordance with the General Terms and Conditions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

4. 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 in Section A.1.1. of these terms and conditions shall be determined in accordance with the following methods:  
Emissions Limitation:

3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section C.3. In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 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.

Emissions Limitation:

58.8 pounds of VOC per day from coatings

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section C.2.

Emissions Limitation:

12.42 tons of VOC per year from both coatings and cleanup materials

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections C.2, C.4, and C.5.

Emissions Limitation:

0.551 lb of PE per hour

Applicable Compliance Method:

To determine the worst case PE rate, the following equation shall be used:

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

where E = PE rate (lbs/hr);

TE = fractional transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (0.25); and

CE = fractional control efficiency of the control equipment (0.99).

When requested by the Ohio EPA, the permittee shall demonstrate compliance with the above emissions limitation pursuant to OAC rule 3745-17-03(B)(10).

Emissions Limitation:

2.41 tons of PE per year

Applicable Compliance Method:

Compliance shall be based on multiplying the allowable hourly emissions limitation by 8760 hours per year, and then dividing by 2000 pounds per ton.  
Emissions Limitation:

Visible particulate emissions from any stack serving this emissions unit shall not exceed ten percent opacity, as a six-minute average

Applicable Compliance Method:

When requested by the Ohio EPA, compliance with the above visible emission limitation shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

F. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1652050029 Emissions Unit ID: K003 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>
K003 - Automotive style booth - Paint Booth C/Rail Area - miscellaneous metal parts coating line.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 33.6 pounds per day from coatings, and 6.99 tons per year from both coatings and cleanup materials*.  Particulate emissions (PE) shall not exceed 0.551 pounds per hour and 2.41 tons per year from coatings.  Visible particulate emissions from any stack serving this emissions unit shall not exceed ten percent opacity, as a six-minute average.  See Section B.1 below.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(d).  *Cleanup material emissions include emissions from cleaning the parts prior to coating application (i.e., manual wiping of parts) and emissions from cleaning the paint guns, booth walls, etc.
	(PTI 16-02451)	
	OAC rule 3745-21-09(U)(1)(d)	
	OAC rule 3745-17-11(B)(1)	
	OAC rule 3745-17-07(A)(1)	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) None

B. **Operational Restrictions**

1. The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation.

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

1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

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

- a. the name and identification number of each coating employed;
- b. the VOC content of each coating, in pounds per gallon, as applied;
- c. the number of gallons of each coating, as applied; and
- d. the daily VOC emissions from all the coatings employed, in pounds, [i.e., the sum of (b) times (c) for each coating employed].

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

- a. the name and identification number of each coating, as applied; and
- b. the mass VOC per volume of each coating (excluding water and exempt solvents), as applied.

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

- a. the company identification of each cleanup material employed;
- b. the number of gallons of each cleanup material employed;
- c. the VOC content of each cleanup material employed, in pounds per gallon;
- d. the total VOC emissions from all the cleanup materials employed, in pounds [i.e., the sum of (b) x (c) for each cleanup material employed];
- e. the amount of cleanup material recovered, in pounds; and
- f. the total monthly VOC emissions from cleanup operations, in pounds [i.e., (d) - (e)].

5. The permittee shall calculate and record the total annual VOC emissions from coatings and cleanup materials, [i.e., the sum of the daily VOC emission rates from the coating materials for the calendar year in Section C.2 plus the sum of the monthly emissions from cleanup materials for the calendar year in Section C.4].

6. The permit to install for this emissions unit K003 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: VM & P Naphtha  
 TLV (mg/m3): 1398  
 Maximum Hourly Emission Rate (lbs/hr): 5.0\*  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2911.3  
 MAGLC (ug/m3): 33,285.7

Pollutant: Stoddard Solvent  
 TLV (mg/m3): 572  
 Maximum Hourly Emission Rate (lbs/hr): 0.54\*  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 315.43  
 MAGLC (ug/m3): 13,619

Pollutant: Toluene  
 TLV (mg/m3): 188  
 Maximum Hourly Emission Rate (lbs/hr): 1.02\*  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 528.64  
 MAGLC (ug/m3): 4,476

\*Combined emission rate for emissions units K002, K003, and K004.

7. 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.).
8. 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 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 notify the Director (appropriate District Office or local air agency) in writing of any record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (appropriate District Office or local air agency) within 30 days after the event occurs.
- 3. The permittee shall submit quarterly deviation reports that identify each day the VOC emissions exceeded the daily emission limit specified above.

The quarterly deviations reports shall be submitted to the Director (appropriate District Office or local air agency) in accordance with the General Terms and Conditions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

- 4. 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 in Section A.1.1. of these terms and conditions shall be determined in accordance with the following methods:  
Emissions Limitation:

3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section C.3. In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 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.

Emissions Limitation:

33.6 pounds of VOC per day from coatings

Applicable Compliance Method:

Compliance shall based upon the record keeping specified in Section C.2.

Emissions Limitation:

6.99 tons of VOC per year from both coatings and cleanup materials

Applicable Compliance Method:

Compliance shall based upon the record keeping specified in Sections C.2, C.4, and C.5.

Emissions Limitation:

0.551 lb of PE per hour

Applicable Compliance Method:

To determine the worst case PE rate, the following equation shall be used:

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

where E = PE rate (lbs/hr);

TE = fractional transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (0.25); and

CE = fractional control efficiency of the control equipment (0.99).

When requested by the Ohio EPA, the permittee shall demonstrate compliance with the above emissions limitation pursuant to OAC rule 3745-17-03(B)(10).

Emissions Limitation:

2.41 tons of PE per year

Applicable Compliance Method:

Compliance shall be based on multiplying the allowable hourly emissions limitation by 8760 hours per year, and then dividing by 2000 pounds per ton.

Emissions Limitation:

Visible particulate emissions from any stack serving this emissions unit shall not exceed ten percent opacity, as a six-minute average

Applicable Compliance Method:

When requested by the Ohio EPA, compliance with the above visible emission limitation shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

**F. Miscellaneous Requirements**

- 1. None

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Facility ID: 1652050029 Emissions Unit ID: K004 Issuance type: Final State Permit To Operate

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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>
K004 - Binks Model 8-12 spray booth - Exhaust Chamber D/Training Facility - miscellaneous metal parts coating line.	OAC rule 3745-31-05(A)(3) (PTI 16-02451)	<p>Volatile organic compound (VOC) emissions shall not exceed 84.0 pounds per day from coatings, and 17.02 tons per year from both coatings and cleanup materials*.</p> <p>Particulate emissions (PE) shall not exceed 0.551 pounds per hour and 2.41 tons per year from coatings.</p> <p>Visible particulate emissions from any stack serving this emissions unit shall not exceed ten percent opacity, as a six-minute average.</p>

See Section B.1 below.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(d).

\*Cleanup material emissions include emissions from cleaning the parts prior to coating application (i.e., manual wiping of parts) and emissions from cleaning the paint guns, booth walls, etc.

OAC rule 3745-21-09(U)(1)(d)

3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit

OAC rule 3745-17-11(B)(1)

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

OAC rule 3745-17-07(A)(1)

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) None

B. **Operational Restrictions**

1. The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation.

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

1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.
2. The permittee shall collect and record the following information each day for the coating line:
  - a. the name and identification number of each coating employed;
  - b. the VOC content of each coating, in pounds per gallon, as applied;
  - c. the number of gallons of each coating, as applied; and
  - d. the daily VOC emissions from all the coatings employed, in pounds, [i.e., the sum of (b) times (c) for each coating employed].
3. The permittee shall collect and record the following information each month for the coating line:
  - a. the name and identification number of each coating, as applied; and
  - b. the mass VOC per volume of each coating (excluding water and exempt solvents), as applied.
4. The permittee shall collect and record the following information each month for the coating line:
  - a. the company identification of each cleanup material employed;
  - b. the number of gallons of each cleanup material employed;
  - c. the VOC content of each cleanup material employed, in pounds per gallon;
  - d. the total VOC emissions from all the cleanup materials employed, in pounds [i.e., the sum of (b) x (c) for each cleanup material employed];
  - e. the amount of cleanup material recovered, in pounds; and
  - f. the total monthly VOC emissions from cleanup operations, in pounds [i.e., (d) - (e)].
5. The permittee shall calculate and record the total annual VOC emissions from coatings and cleanup materials, [i.e., the sum of the daily VOC emission rates from the coating materials for the calendar year in Section C.2 plus the sum of the monthly emissions from cleanup materials for the calendar year in Section C.4].
6. The permit to install for this emissions unit K004 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: VM & P Naphtha  
 TLV (mg/m3): 1398  
 Maximum Hourly Emission Rate (lbs/hr): 5.0\*  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2911.3  
 MAGLC (ug/m3): 33,285.7

Pollutant: Stoddard Solvent  
 TLV (mg/m3): 572  
 Maximum Hourly Emission Rate (lbs/hr): 0.54\*  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 315.43  
 MAGLC (ug/m3): 13,619

Pollutant: Toluene  
 TLV (mg/m3): 188  
 Maximum Hourly Emission Rate (lbs/hr): 1.02\*  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 528.64  
 MAGLC (ug/m3): 4,476

\*Combined emission rate for emissions units K002, K003, and K004.

7. 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.).

8. 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 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 notify the Director (appropriate District Office or local air agency) in writing of any record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (appropriate District Office or local air agency) within 30 days after the event occurs.

3. The permittee shall submit quarterly deviation reports that identify each day the VOC emissions exceeded the daily emission limit specified above.

The quarterly deviations reports shall be submitted to the Director (appropriate District Office or local air agency) in accordance with the General Terms and Conditions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

4. 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 in Section A.1.1. of these terms and conditions shall be determined in accordance with the following methods:  
 Emissions Limitation:

3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section C.3. In accordance with OAC rule 3745-21-04(B)(5), USEPA Method 24 shall be used to determine the VOC contents of the coatings. If,

pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 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.

Emissions Limitation:

84.0 pounds of VOC per day from coatings

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Section C.2.

Emissions Limitation:

17.02 tons of VOC per year from both coatings and cleanup materials

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in Sections C.2, C.4, and C.5.

Emissions Limitation:

0.551 lb of PE per hour

Applicable Compliance Method:

To determine the worst case PE rate, the following equation shall be used:

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

where E = PE rate (lbs/hr);

TE = fractional transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (0.25); and

CE = fractional control efficiency of the control equipment (0.99).

When requested by the Ohio EPA, the permittee shall demonstrate compliance with the above emissions limitation pursuant to OAC rule 3745-17-03(B)(10).

Emissions Limitation:

2.41 tons of PE per year

Applicable Compliance Method:

Compliance shall be based on multiplying the allowable hourly emissions limitation by 8760 hours per year, and then dividing by 2000 pounds per ton.

Emissions Limitation:

Visible particulate emissions from any stack serving this emissions unit shall not exceed ten percent opacity, as a six-minute average

Applicable Compliance Method:

When requested by the Ohio EPA, compliance with the above visible emission limitation shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

**F. Miscellaneous Requirements**

1. None