

Facility ID: 1318000242 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.

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[Go to Part II for Emissions Unit K005](#)

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Facility ID: 1318000242 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 - Laminators coater and infrared flash-off oven	OAC rule 3745-31-05(A)(3) (PTI 13-04561 issued 10/04/05)	Volatile organic compound (VOC) emissions shall not exceed 29.8 pounds per hour (lbs/hr). VOC content of the coatings shall not exceed 0.48 pound per gallon (lb/gal). The requirements of this rule include compliance with OAC rule 3745-31-05(C).
	OAC rule 3745-21-09(F)	The requirements established by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Title V, MACT, and Nonattainment NSR	See section A.2.a through A.2.b. VOC emissions shall not exceed 31.1 tons per rolling, 12-month period.

2. Additional Terms and Conditions

- (a) The maximum annual VOC emissions generated by the emissions units listed in section A.2.c below shall not exceed 93.3 tons per year, based on a rolling, 12-month summation of emissions. The maximum annual Hazardous Air Pollutant (HAP) emissions and material usage generated by the emissions units listed in section A.2.c below shall not exceed 9.9 tons per year for any single HAP and 23.8 tons per year for any combined HAPs, based on a rolling, 12-month summation of emissions. The current list of emissions units at this facility are K002, K005, and K006.

B. Operational Restrictions

1. The permittee shall not exceed 31.1 tons VOC material usage for this emissions unit, based on a rolling, 12-month summation of VOC material usage per year, determined by summing (C.1.d) /2000 lbs/ton for each coating.
2. The permittee shall not exceed 93.3 tons VOC material usage for the emissions units at this facility, based on a rolling, 12-month summation of VOC material usage, determined by summing (C.1.d) / 2000 lbs/ton for each coating employed for all emissions units at this facility.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information monthly for this emissions unit:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content, in lbs/gal, of each coating, as applied;
 - c. the amount, in gallons, of each coating;
 - d. the VOC emission rate and VOC material usage, in lbs/month, determined by summing (b x c) for each coating employed;

- e. the VOC content, in lbs/gal less water and exempt solvents, of each coating, as applied;
- f. the individual HAP and combined HAP content in lbs/gal, for each coating material employed; and
- g. the total individual HAP and combined HAP emissions and material usage for each coating material employed, in lbs/month [sum of (f x c) for all adhesives employed].

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Cleveland Division of Air Quality (CDAQ) contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on an emissions unit - by - emissions unit basis.

- 2. The permittee shall maintain monthly records of the following for the facility (see A.2.c):
 - a. the rolling, 12-month individual HAP material usage and emissions calculated by summing the records of C.1.g in pounds per month for the emissions units at this facility;
 - b. the rolling, 12-month combined HAP material usage and emissions from all materials employed calculated by summing the records of C.1.g in pounds per month for the emissions units at this facility;
 - c. the rolling, 12-month VOC emission rate calculated by summing the records of C.1.d in pounds per month for the emissions units at this facility; and
 - d. the rolling, 12-month VOC material usage calculated by summing the records of C.1.d in pounds per month for the emissions units at this facility.
- 3. 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 for each pollutant potentially emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: vinyl acetate
 TLV (ug/m3): 35210.6
 Maximum Hourly Emission Rate (lbs/hr): 2.6 (assuming worst case)
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 49.72
 MAGLC (ug/m3): 838.3

- 4. Physical changes to or changes in the method of operation of the emissions unit after its installation 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 be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)", than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
- 5. 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) is (are) defined as a modification under other provisions of the modification definition, 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 its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

- 1. The permittee shall notify the CDAQ 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 CDAQ within 30 days following the end of the calendar month.
- 2. The permittee shall submit annual reports that specify the total individual HAP, total combined HAPs, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
- 3. The permittee shall submit deviation (excursion) reports which include the following information for the facility (see

A.2.c):

- a. an identification of each month during which the rolling, 12-month individual HAP material usage and emissions exceed 9.9 tons/yr based on a rolling, 12-month summation;
- b. an identification of each month during which the rolling, 12-month combined HAP material usage and emissions exceed 23.8 tons/yr based on a rolling, 12-month summation;
- c. an identification of each month during which the rolling, 12-month VOC emissions exceed 93.3 tons/yr based on a rolling, 12-month summation; and
- d. an identification of each month during which the rolling, 12-month VOC material usage exceed 93.3 tons/yr based on a rolling, 12-month summation.

The deviation (excursion) report shall be sent to the CDAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

4. The permittee shall submit deviation (excursion) reports to the CDAQ which identify all exceedances of the rolling, 12-month VOC material usage limitation (31.1 tons VOC material per rolling 12-months) for this emissions unit and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative VOC material usage levels.

The deviation (excursion) report shall be sent to the CDAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

E. Testing Requirements

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

a. Emission Limitation:
VOC emissions shall not exceed 29.8 lbs/hr.

Applicable Compliance Method:
Compliance with the maximum hourly VOC emissions limitation (potential to emit) shall be assumed if company does not exceed the lbs VOC /gal limitation. The pound per hour limitation was determined using the following equation:
$$\text{VOC (lb/hr)} = (0.48 \text{ lb VOC/gal}) * (62 \text{ gal/hr})$$

b. Emission Limitation:
VOC emissions shall not exceed 31.1 tpy per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be determined based upon the record keeping specified in section C and the following equation:

$$\text{VOC (tpy)} = (\text{summation of section C.1.d per rolling, 12-month period}) / 2000 \text{ lbs/ton}$$

c. Emission Limitation:
93.3 tons VOC per rolling, 12-month period for this facility (see A.2.c)

Applicable Compliance Method:
Compliance shall be determined based on the record keeping specified in section C.2.

d. Emission Limitation:
9.9 tons individual HAP emissions per rolling, 12-month period for this facility (see A.2.c).

Applicable Compliance Method:
Compliance shall be determined based on the record keeping specified in section C.2.

e. Emission Limitation:
23.8 tons combined HAP emissions per rolling, 12-month period for this facility (see A.2.c).

Applicable Compliance Method:
Compliance shall be determined based on the record keeping specified in section C.2.

f. Operational Limitation:
VOC content of coatings shall not exceed 0.48 lb/gal.

Applicable Compliance Method:
Compliance with the above limitation shall be based on the record keeping specified in section C.1 (a certificate of analysis from the material supplier may be used to satisfy this requirement). The VOC content of the coatings shall be determined using U.S. EPA Method 24 of 40 CFR, Part 60, Appendix A.

F. Miscellaneous Requirements

1. None

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

Facility ID: 1318000242 Emissions Unit ID: K005 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>
K005 - Laminators coater and infrared flash-off oven	OAC rule 3745-31-05(A)(3) (PTI 13-04561 issued 10/04/05)	<p>Volatile organic compound (VOC) emissions shall not exceed 41.8 pounds per hour (lbs/hr).</p> <p>VOC content of the coatings shall not exceed 0.48 pound per gallon (lb/gal).</p>
	OAC rule 3745-21-09(F)	The requirements of this rule include compliance with OAC rule 3745-31-05(C).
	OAC rule 3745-31-05(C) Synthetic Minor to avoid Title V, MACT, and Nonattainment NSR	<p>The requirements established by this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>See section A.2.a through A.2.b.</p> <p>VOC emissions shall not exceed 31.1 tons per rolling, 12-month period.</p>

2. **Additional Terms and Conditions**
 - (a) The maximum annual VOC emissions generated by the emissions units listed in section A.2.c below shall not exceed 93.3 tons per year, based on a rolling, 12-month summation of emissions. The maximum annual Hazardous Air Pollutant (HAP) emissions and material usage generated by the emissions units listed in section A.2.c below shall not exceed 9.9 tons per year for any single HAP and 23.8 tons per year for any combined HAPs, based on a rolling, 12-month summation of emissions. The current list of emissions units at this facility are K002, K005, and K006.

B. Operational Restrictions

1. The permittee shall not exceed 31.1 tons VOC material usage for this emissions unit, based on a rolling, 12-month summation of VOC material usage per year, determined by summing (C.1.d) /2000 lbs/ton for each coating.
2. The permittee shall not exceed 93.3 tons VOC material usage for the emissions units at this facility, based on a rolling, 12-month summation of VOC material usage, determined by summing (C.1.d) / 2000 lbs/ton for each coating employed for all emissions units at this facility.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information monthly for this emissions unit:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content, in lbs/gal, of each coating, as applied;
 - c. the amount, in gallons, of each coating;
 - d. the VOC emission rate and VOC material usage, in lbs/month, determined by summing (b x c) for each coating employed;
 - e. the VOC content, in lbs/gal less water and exempt solvents, of each coating, as applied;
 - f. the individual HAP and combined HAP content in lbs/gal, for each coating material employed; and
 - g. the total individual HAP and combined HAP emissions and material usage for each coating material employed, in lbs/month [sum of (f x c) for all adhesives employed].

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Cleveland Division of Air Quality (CDAQ) contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on an emissions unit - by - emissions unit basis.

2. The permittee shall maintain monthly records of the following for the facility (see A.2.c):
 - a. the rolling, 12-month individual HAP material usage and emissions calculated by summing the records of C.1.g in pounds per month for the emissions units at this facility;
 - b. the rolling, 12-month combined HAP material usage and emissions from all materials employed calculated by summing the records of C.1.g in pounds per month for the emissions units at this facility;
 - c. the rolling, 12-month VOC emission rate calculated by summing the records of C.1.d in pounds per month for the emissions units at this facility; and
 - d. the rolling, 12-month VOC material usage calculated by summing the records of C.1.d in pounds per month for the emissions units at this facility.
3. The permit to install for this emissions unit (K005) 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 for each pollutant potentially emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: vinyl acetate
 TLV (ug/m3): 35210.6
 Maximum Hourly Emission Rate (lbs/hr): 2.6 (assuming worst case)
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 49.72
 MAGLC (ug/m3): 838.3
4. Physical changes to or changes in the method of operation of the emissions unit after its installation 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 be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)", than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
5. 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) is (are) defined as a modification under other provisions of the modification definition, 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 its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the CDAQ 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 CDAQ within 30 days following the end of the calendar month.
2. The permittee shall submit annual reports that specify the total individual HAP, total combined HAPs, and VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall submit deviation (excursion) reports which include the following information for the facility (see A.2.c):
 - a. an identification of each month during which the rolling, 12-month individual HAP material usage and emissions exceed 9.9 tons/yr based on a rolling, 12-month summation;
 - b. an identification of each month during which the rolling, 12-month combined HAP material usage and emissions exceed 23.8 tons/yr based on a rolling, 12-month summation;
 - c. an identification of each month during which the rolling, 12-month VOC emissions exceed 93.3 tons/yr based on a rolling, 12-month summation; and
 - d. an identification of each month during which the rolling, 12-month VOC material usage exceed 93.3 tons/yr

based on a rolling, 12-month summation.

The deviation (excursion) report shall be sent to the CDAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

4. The permittee shall submit deviation (excursion) reports to the CDAQ which identify all exceedances of the rolling, 12-month VOC material usage limitation (31.1 tons VOC material per rolling 12-months) for this emissions unit and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative VOC material usage levels.

The deviation (excursion) report shall be sent to the CDAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

E. Testing Requirements

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

a. Emission Limitation:
VOC emissions shall not exceed 41.8 lbs/hr.

Applicable Compliance Method:
Compliance with the maximum hourly VOC emissions limitation (potential to emit) shall be assumed if company does not exceed the lbs VOC /gal limitation. The pound per hour limitation was determined using the following equation:
$$\text{VOC (lb/hr)} = (0.48 \text{ lb VOC/gal}) * (62 \text{ gal/hr})$$

b. Emission Limitation:
VOC emissions shall not exceed 31.1 tpy per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be determined based upon the record keeping specified in section C and the following equation:

$$\text{VOC (tpy)} = (\text{summation of section C.1.d per rolling, 12-month period}) / 2000 \text{ lbs/ton}$$

c. Emission Limitation:
93.3 tons VOC per rolling, 12-month period for this facility (see A.2.c)

Applicable Compliance Method:
Compliance shall be determined based on the record keeping specified in section C.2.

d. Emission Limitation:
9.9 tons individual HAP emissions per rolling, 12-month period for this facility (see A.2.c).

Applicable Compliance Method:
Compliance shall be determined based on the record keeping specified in section C.2.

e. Emission Limitation:
23.8 tons combined HAP emissions per rolling, 12-month period for this facility (see A.2.c).

Applicable Compliance Method:
Compliance shall be determined based on the record keeping specified in section C.2.

f. Operational Limitation:
VOC content of coatings shall not exceed 0.48 lb/gal.

Applicable Compliance Method:
Compliance with the above limitation shall be based on the record keeping specified in section C.1 (a certificate of analysis from the material supplier may be used to satisfy this requirement). The VOC content of the coatings shall be determined using U.S. EPA Method 24 of 40 CFR, Part 60, Appendix A.

F. Miscellaneous Requirements

1. None