

Facility ID: 1409070634 Issuance type: Final State Permit To Operate

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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.

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

Facility ID: 1409070634 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 - Miscellaneous metal parts paint spray booth 5	OAC rule 3745-31-05(A)(3) (PTI 14-05771)	Volatile Organic Compound (VOC) emissions shall not exceed 8.0 lbs/hour for coatings*. VOC emissions shall not exceed 7.5 TPY, including coatings and cleanup materials. See terms and conditions A.2.d, A.2.e, B.1, B.2, and B.3. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(b) and OAC rule 3745-21-09(U)(1)(c). *The hourly emissions limitation outlined above is based upon the emissions unit's potential to emit. Therefore, no records are required to demonstrate compliance with this limit.
	OAC rule 3745-21-09(U)(1)(b) OAC rule 3745-21-09(U)(1)(c) OAC rule 3745-31-05(C)	See term and condition A.2.b. See term and condition A.2.c. See term A.2.e.

2. Additional Terms and Conditions

- (a) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by coating and cleanup material usage restrictions, the VOC content limitations and emissions limitations.
 - The volatile organic compound (VOC) content of the zinc rich primer coatings shall not exceed 4.0 pounds of VOC per gallon of coating, excluding water and exempt solvents.
 - The VOC content of coatings that are not defined as zinc rich primer coatings shall not exceed 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents.
 - The VOC content of each cleanup material shall not exceed 7.7 pounds of VOC per gallon.
 - The total usage of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from K001, K002, K003, K004, and K005 and any registration status and/or permit exempt emissions units shall not exceed 9.9 TPY* for any single HAP, as a rolling, 12-month summation, and 24.9 TPY* for any combination of HAPs, as a rolling, 12-month summation.

* This assumes the amount of HAPs used is equivalent to the amount of HAPs that will evaporate and be emitted.

B. Operational Restrictions

1. The use of zinc rich primer coatings, as defined in Ohio Administrative Code (OAC) rule 3745-21-01(D)(62), in emissions unit K005, shall not exceed 500 gallons per year, excluding water and exempt solvents.
2. The use of coatings in emissions unit K005, other than zinc rich primer coatings, shall not exceed 2500 gallons per year, excluding water and exempt solvents.
3. The use of cleanup materials in emissions unit K005 shall not exceed 550 gallons per year.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each month for emissions unit K005:
 - a. The name and identification number of each coating, as applied.
 - b. The VOC content of each coating, as applied, in pounds per gallon, excluding water and exempt solvents.
 - c. The volume of each coating employed, in gallons, excluding water and exempt solvents.
 - d. The total volume of all coatings employed, in gallons, excluding water and exempt solvents.
 - e. The name and identification number of each cleanup material employed.
 - f. The VOC content of each cleanup material, in pounds per gallon.
 - g. The volume of each cleanup material employed, in gallons.
 - h. The total VOC emissions from all coatings employed (b x c).
 - i. The total VOC emissions from all cleanup materials employed (f x g).
 - j. The total VOC emissions from all coatings and cleanup materials employed, in pounds [(b x c) + (f x g)].

These records shall be summarized at the end of the calendar year.

2. The permit to install for 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 emitted by this emissions unit using data from the permit to install application and the SCREEN3 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN3 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Cyclohexanone
 TLV (ug/m3): 80,300
 Maximum Hourly Emission Rate (lbs/hr): 8.0
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 174.5
 MAGLC (ug/m3): 1912

Pollutant: Formaldehyde
 TLV (ug/m3): 370
 Maximum Hourly Emission Rate (lbs/hr): 0.0052
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.9002
 MAGLC (ug/m3): 8.8

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics 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 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 with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. Physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
 If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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 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 it's evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. When the 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.
3. The permittee shall collect and record the following information each month for the emissions units identified in term and condition A.2.e:
 - a. The name and identification number of each coating employed;
 - b. The individual HAP* content for each HAP of each coating, in pounds of individual HAP per gallon of coating, as applied;

- c. The total combined HAP content of each coating, in pounds of combined HAPs per gallon of coating, as applied [sum all the individual HAP contents from (b)];
 - d. The number of gallons of each coating employed;
 - e. The name and identification number of each cleanup material employed;
 - f. The individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - g. The total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];
 - h. The number of gallons of each cleanup material employed;
 - i. The total individual HAP usage** for each HAP from all coatings and cleanup materials employed, in pounds or tons [for each HAP, the sum of (b) times (d) for all coatings plus the sum of (f) times (h) for all cleanup materials, and divided by 2,000 pounds per ton if the units are in tons];
 - j. The total combined HAP usage** from all coatings and cleanup materials employed, in pounds or tons [the sum of (c) times (d) for all coatings plus the sum of (g) times (h) for all cleanup materials, and divided by 2,000 pounds per ton if the units are in tons];
 - k. The updated rolling, 12-month summation of usage for each individual HAP**, in tons (this shall include the information for the current month and the preceding eleven calendar months); and
 - l. The updated rolling, 12-month summation of usage for the total combined HAPs**, in tons. This shall include the information for the current month and the preceding eleven calendar months.

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a line-by-line basis.

** This assumes the amount of HAPs used is equivalent to the amount of HAPs that will evaporate and be emitted.

D. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of noncomplying coatings and/or cleanup materials (i.e., VOC contents). The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days after the exceedance occurs.
2. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which specify the total VOC emissions from emissions unit K005 for the previous calendar year. This report shall also specify the total volume, in gallons, of coatings employed in emissions unit K005 and the total volume, in gallons, of cleanup materials employed in emissions unit K005 for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall submit deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.e. If no exceedances occurred, the permittee shall state so in the report.
4. Unless otherwise noted in the above terms, the deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. USEPA methods 24 and 24A shall be used to determine the VOC content for coatings and cleanup materials. If pursuant to 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or cleanup material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or cleanup material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.
2. Compliance with the emissions limitations in Section A. and usage limitations in Section B. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emissions Limitation:
8.0 lbs/hour VOC, coatings
 - Applicable Compliance Method:
The hourly VOC emissions limitation for coatings was determined by multiplying the maximum VOC content of applied coating identified in terms and condition A.2.b by the maximum hourly coating application rate of 2 gallons/hour.
 - b. Emissions Limitation:
7.5 TPY VOC, including coatings and cleanup materials
 - Applicable Compliance Method:
Compliance with the annual VOC emissions limitation shall be determined by adding the annual emissions from coating and cleanup material usage. Annual VOC emissions from coating shall be determined by multiplying the VOC content of applied coatings by the annual usage. Annual VOC emissions from cleanup material are determined by multiplying the VOC content of the cleanup material by the annual usage. The annual emissions from the coating and cleanup are then added and divided by 2000 lb/ton to determine compliance with the annual emissions limitation. Compliance shall be based upon the record keeping requirements as specified in term and condition C.1.
 - c. Usage Limitations:
2500 gallons/yr, of coatings other than zinc rich primers;
500 gallons/yr, of zinc rich primer coatings; and
550 gallons/yr, of cleanup materials.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements as specified in term and condition C.1.

F. **Miscellaneous Requirements**

1. None