

Facility ID: 0857043048 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.

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

Facility ID: 0857043048 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> |
|---|--|--|
| Paint Booth; prep area etching and coating misc. metal parts | OAC rule 3745-31-05(A)(3) PTI 08-3716 | The organic compound (OC) emissions from this emissions unit shall not exceed 169.8 lbs/day and 13.24 tons/yr (from all materials used in prep area) The volatile organic compound (VOC) emissions from this emissions unit shall not exceed 58.88 lbs/day, excluding cleanup, and 11.41 tons/yr, including cleanup (from all the coatings used for misc. metal parts coating) The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e)(i). The maximum daily coating usage rate shall not exceed 8 gallons. (from all the coatings used for misc. metal parts coating) |

OAC rule 3745-21-09(U)(2)(e)(i)

2. Additional Terms and Conditions

- (a) The 169.8 lbs OC/day emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop additional monitoring, record keeping and/or reporting requirements to ensure compliance with this limitation.
The 58.88 lbs VOC/day emission limitation was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop additional monitoring, record keeping and/or reporting requirements to ensure compliance with this limitation.

B. Operational Restrictions

1. None

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day when coating miscellaneous metals parts:
 - a. The name and identification number of each coating employed.
 - b. The volume, in gallons, of each coating employed.
 - c. The total volume, in gallons, of all the coatings employed.
2. The permittee shall collect and record the following information each month for the purpose of determining annual OC emissions from prepping:
 - a. The name and identification number of each material employed

- b. The number of gallons of each material employed.
 - c. The OC content of each material employed, in pounds per gallon.
 - d. The total OC emissions from all the materials employed, in pounds [summation of (b x c) for all materials].
3. The permittee shall collect and record the following information each month for the purpose of determining annual VOC emissions from the coating of miscellaneous parts:
- a. The name and identification number 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 coatings and cleanup materials employed [summation of (b x c) for all coatings + summation of (b x c) for all cleanup materials], in pounds.
4. The permit to install for this emissions unit K001 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" pollutants:

Pollutant: 1 Methoxy, 2 Propanol

TLV (mg/m3): 368.59

Maximum Hourly Emission Rate (lbs/hr): 15.65

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 603.78

MAGLC (ug/m3): 8,775.93

Pollutant: n-Butanol

TLV (mg/m3): 60.63

Maximum Hourly Emission Rate (lbs/hr): 11.76

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 453.7

MAGLC (ug/m3): 1444

Pollutant: Xylene

TLV (mg/m3): 434.19

Maximum Hourly Emission Rate (lbs/hr): 12.18

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 469.90

MAGLC (ug/m3): 10,337.9

Pollutant: MIAK

TLV (mg/m3): 233.54

Maximum Hourly Emission Rate (lbs/hr): 20.84

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 804

MAGLC (ug/m3): 5560.42

Pollutant: IPA

TLV (mg/m3): 938.07

Maximum Hourly Emission Rate (lbs/hr): 47.95

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 1,849.91

MAGLC (ug/m3): 23,406.37

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 (typically for 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.
- 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required.

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.).
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) 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 RAPCA) in writing of any daily record showing that the coating line employed more than the applicable maximum daily coating usage limitation of 8 gallons. The notification shall include a copy of such record and shall be sent to the Director (the RAPCA) within 45 days after the exceedance occurs.
2. The permittee shall submit annual reports that specify the total OC emissions from prepping and the total VOC emissions from coating metals 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 specified emission limitations in Section A.1. of this permit shall be demonstrated in accordance with the following methods:
Prep Area:

Emission Limitation -
169.8 lbs OC/day

Applicable Compliance Method -
Compliance may be determined by multiplying the maximum hourly material usage rate (gallons/hr) by the maximum OC content of all the materials employed (lbs OC/gallon).

Emission Limitation -
13.24 tons OC/yr

Applicable Compliance Method -
Compliance shall be based upon the record keeping requirements specified in Section C.2. of this permit and shall be the summation of the 12 monthly OC emission rates, divided by 2000 lbs/ton.

Miscellaneous Metal Parts:

Emission Limitation -
58.88 lbs VOC/day

Applicable Compliance Method -
Compliance may be determined by multiplying the maximum hourly coating usage rate (gallons/hr) by the maximum VOC content of all the coatings employed (lbs VOC/gallon of coating).

Emission Limitation -
11.41 tons VOC/yr, including cleanup

Applicable Compliance Method -
Compliance shall be based upon the record keeping requirements specified in Section C.3. of this permit and shall be the summation of the 12 monthly VOC emission rates, divided by 2000 lbs/ton.

Emission Limitation -
The maximum daily coating usage rate shall not exceed 8 gallons.

Applicable Compliance Method -
Compliance shall be based upon the record keeping requirements specified in Section C.1. of this permit.

2. Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the coatings and cleanup materials.

F. **Miscellaneous Requirements**

1. None