

Facility ID: 1431072600 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: 1431072600 Emissions Unit ID: P019 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>
vacuum truck operation for consolidation of organic materials	OAC rule 3745-31-05(A)(3) (PTI 14-4889)	0.63 lb organic compound (OC) emissions/hr 2.76 tons per year (TPY) of OC emissions
	OAC rule 3745-31-05(D) (PTI 14-04889)	See Section A.2.a below.
	OAC rule 3745-21-07(G)(2)	See Section A.2.b below.
		The hourly OC emission limitation specified by this rule is less stringent than the hourly OC emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

**2. Additional Terms and Conditions**

- (a) The hourly and annual OC emission limitations specified above are based upon the emissions unit's potential to emit. Therefore, no hourly or annual records are required to demonstrate compliance with these emission limitations.  
The total allowable usage of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 TPY\* for any single HAP and 24.9 TPY\* for any combination of HAPs. Compliance with these emission limitations shall be based on a rolling, 12-month summation.  
  
\* This assumes the HAP's emitted are the same as the amount of HAP's used since all HAP's used evaporate.

**B. Operational Restrictions**

1. The permittee shall not process any benzene NESHAP waste as referenced by 40 CFR, Part 61, Subpart FF, Section 61.340 in this emissions unit.

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

1. The permit to install for this emissions unit was evaluated based on the actual materials employed (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxics Emissions" policy ("Air Toxics Policy") was applied for each toxic pollutant 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).

The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Benzene  
 TLV (ug/m3): 1,600  
 Maximum Hourly Emission Rate (lbs/hr): 0.12; 0.0148 gram/sec  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 34.77  
 MAGLC (ug/m3): 38.1

Pollutant: Vinyl Chloride  
 TLV (ug/m3): 2,560

Maximum Hourly Emission Rate (lbs/hr): 0.14; 0.0180 gram/sec  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 42.28  
 MAGLC (ug/m3): 61.0

Pollutant: Styrene  
 TLV (ug/m3): 85,200  
 Maximum Hourly Emission Rate (lbs/hr): 0.63  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 186.5  
 MAGLC (ug/m3): 2,029

Physical changes to or 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 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 Toxics Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxics Policy" will not be satisfied, the permittee shall not make the change. Changes that can affect the parameters used in the "Air Toxics 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 Toxics Policy" will be satisfied with the above changes, 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. If the change(s) is (are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], 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 Toxics 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 Toxics 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 Toxics Policy" for the change.
2. The permittee shall collect and record the following information each month for the entire facility:
- a. the name and identification number of each organic material processed;
  - b. the individual HAP content for each HAP of each organic material, in pounds of individual HAP per gallon of material, as processed;
  - c. the total combined HAP content of each organic material, in pounds of combined HAPs per gallon of material, as processed [sum all the individual HAP contents from (b)];
  - d. the number of gallons of each organic material processed;
  - e. the total individual HAP usage for each HAP from all organic materials processed, in pounds or tons per month [for each HAP, the sum of (b) times (d) for each material (and divided by 2,000 lbs/ton if the units are in tons)];
  - f. the total combined HAP usage from all organic materials processed, in pounds or tons per month [the sum of (c) times (d) for each material (and divided by 2,000 lbs/ton if the units are in tons)];
  - g. the updated rolling, 12-month summation of usage for each individual HAP emissions\*, in tons (this shall include the information for the current month and the preceding eleven calendar months); and
  - h. the updated rolling, 12-month summation of usage for total combined HAP emissions\*, in tons. This shall include the information for the current month and the preceding eleven calendar months.

Note: 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 individual emissions unit basis.

\* This assumes the HAP(s) emitted are the same as the amounts of HAP(s) used since all HAP(s) used evaporated.

**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 the benzene NESHAP waste as referenced by 40 CFR, Part 61, Subpart FF, Section 61.340 in this emissions unit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
2. The permittee shall submit quarterly deviation (excursion) reports for this emissions unit that contain an identification of any exceedance of the rolling, 12-month HAP emission limitations of 9.9 tons and 24.9 tons for any single HAP and combination of HAPs, respectively.
3. All quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this

permit.

4. The permittee shall submit annual reports that specify the individual and combined HAP emissions, in tons, for the previous calendar year. These reports shall be submitted by January 30 of each year for the preceding calendar year.

**E. Testing Requirements**

1. Compliance with the OC and HAP emission limitations shall be determined by the following methods:  
OC Emission Limitation: 0.63 lb of OC emissions/hour; 2.76 TPY of OC emissions

Applicable Compliance Method: The hourly OC emission limitation represents the emission unit's potential to emit and is based upon monitoring emissions from the exhaust of similar operations. The process monitored utilizes a pump to remove liquids/sludges from a rail car and transfer them to a transport trailer.

The following parameters were used in establishing the hourly OC emission limitation:

Air Flow Measured: 350 cfm  
Organic Concentration: 400 ppm  
Air Density: 0.075 lb/cf  
Air Mass Flow:  $350 \times 0.075 \text{ lb/cf} = 26.25 \text{ lb/minute} = 1,575 \text{ lb/hour}$   
Emission Rate:  $400 \times 1,575/1,000,000 = 0.63 \text{ lb of OC emissions/hour}$

The annual OC emission limitation represents the emission unit's potential to emit and was established by multiplying the hourly OC emission rate (0.63 lb/hour) by 8,760 hours/year.  
HAP Emission Limitations: 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs, based upon a rolling, 12-month summation

Applicable Compliance Method: Compliance with the HAP emission limitations shall be determined by the record keeping requirements specified in Section C.2.

**F. Miscellaneous Requirements**

1. None