

Facility ID: 1431072690 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: 1431072690 Emissions Unit ID: P002 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>
P002 - Aerosol and Non-Aerosol Shredder - Modification	OAC rule 3745-31-05(A)(3) (PTI 14-03398)	Organic Compound (OC) emissions shall not exceed 2.16 lbs/hr when processing aerosol products. OC emissions shall not exceed 0.08 lbs/hr when processing non-aerosol products. OC emissions shall not exceed 9.46 TPY.
	OAC rule 3745-21-07(G)	See terms and conditions B.1 - B.4. 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) Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of a thermal oxidizer when processing aerosol products and the use of a carbon adsorber when processing non-aerosol products, each with at least a 95 % overall control efficiency and compliance with the maximum process rate limitations.

B. Operational Restrictions

1. The permittee shall operate the following control systems that control at least 95% of the organic compound emissions produced by this emissions unit:
 - a. A thermal oxidizer while processing aerosol products.
 - b. A carbon adsorber system while processing non-aerosol products.
2. The average temperature of the exhaust gases from the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1385 degrees F or the average minimum temperature established during the most recent emission test that demonstrated the emissions unit was in compliance.
3. The maximum hourly process rate for this emissions unit while processing aerosol products shall not exceed 1400 pounds.
4. The maximum hourly process rate for this emissions unit while processing non-aerosol products shall not exceed 1954 pounds.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature within the thermal oxidizer when this emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record following information for each day:

- a. All 3-hour blocks of time during which the average temperature within the thermal oxidizer, when the emissions unit was in operation, was below the temperature limitation specified in term B.2.
- b. A log of the downtime for the capture (collection) system, control devices, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall monitor and record on a weekly basis the control efficiency of the carbon adsorption system. Breakthrough shall be determined as less than 95% overall control and shall be calculated by: $1 - [(VOC \text{ concentration from carbon outlet}) / (VOC \text{ concentration from carbon inlet})]$ multiplied by 100. Breakthrough shall be confirmed by repeating the monitoring methods for three consecutive hours.
3. The permittee shall maintain hourly records of the pounds of aerosol and non-aerosol products processed in this emissions unit.
4. The permit to install for this emissions unit (P002) was evaluated based on the actual materials (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. 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 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 Ground-Level Concentration (MAGLC).

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

Pollutant: toluene

TLV (ug/m3): 188,400

Maximum Hourly Emission Rate (lbs/hr): 2.16

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 48.2

MAGLC (ug/m3): 4486

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 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 (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; 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 its 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.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
 - a. An identification of all 3-hour blocks of time during which the average temperature of the oxidizer does not comply with the temperature limitation specified in term B.2.
 - b. An identification of any time when carbon breakthrough occurred and the carbon was not immediately replaced with fresh carbon (see term C.2).
 - c. An identification of any exceedances of the hourly process limitations as identified in terms B.3 and B.4.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Terms and Conditions A.1.c.ii.

E. Testing Requirements

1. Compliance with the exhaust temperature of the oxidizer as specified in term B.2 shall be demonstrated by the records in term C.1.
2. Compliance with the throughput limits in terms B.3 and B.4 shall be demonstrated by the records in term C.3.
3. Emission Limitation

Organic Compound (OC) emissions shall not exceed 2.16 lbs/hr when processing aerosol products and shall not exceed 0.08 lbs/hr when processing non-aerosol products. OC emissions shall not exceed 9.46 TPY.

Applicable Compliance Methods

Compliance with the hourly emission limitations outlined in this permit shall be demonstrated by the results of emissions testing outlined in term E.4.

Compliance with the annual limit shall be demonstrated by multiplying the hourly emission rate established by the most recent performance test by 8760 hours per year and dividing by 2000.
4. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior the expiration of this permit.
 - b. The emission testing shall be conducted to demonstrate compliance with the emission limit and overall control efficiency limit during the processing of non-aerosols.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Method 25A. The test method which must be employed to demonstrate compliance with the overall control efficiency are specified below. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "intent to test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and the date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

F. Miscellaneous Requirements

1. None