

Facility ID: 1677140014 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: 1677140014 Emissions Unit ID: P001 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> |
|---|--------------------------------------|--|
| production of plastic molding compound, maximum rated production capacity 7 finished batches/week, air emissions of organic compounds (OCs) vented to and controlled by a chilled-water condenser | OAC rule 3745-31-05 (PTI 16-02052) | 185 pounds/week and 4.8 tons/year of OCs [See sections A.2 "Additional Terms and Conditions"; and B.1 through B.3 "Operational Conditions" below for additional requirements of OAC rule 3745-31-05.] |
| | OAC rule 3745-21-07(G) | exempt pursuant to OAC rule 3745-21-07(G)(9) [See section B.3 below.] |

2. Additional Terms and Conditions

- (a) The above OC emission limits (regulated under OAC rule 3745-31-05) are based on the potential to emit for this emissions unit, as determined from permit application data. Therefore, no record keeping, reporting, or emissions calculations are required to demonstrate compliance with these emission limits. However, if any proposed change(s), such as with compound formulations, diluent ratios, maximum production rate capacity, cleanup materials, etc., or any other change(s), increase(s) the emissions unit's potential to emit, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to making the change(s).
The permittee shall properly install (or have installed), adjust, operate, and maintain, in accordance with the manufacturer's recommendations, instructions, and operating manual(s), a condenser, or comparable air pollution control device, to adequately reduce air emissions of OCs from this emissions unit. Furthermore, the permittee shall properly install (or have installed), adjust, operate, and maintain, in accordance with good engineering design and practice, hoods, ducts, fans, and any other equipment necessary to adequately capture, contain, and vent air emissions of OCs to the applicable air pollution control device.
The permit to install for P001 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 Toxics 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

 Pollutant: methanol (CAS 67-56-1)
 TLV (ug/m3): 262,000
 Maximum Hourly Emission Rate (lbs/hr): 6.25
 Predicted 1-Hour Maximum Ground-Level Concentration at 36 m (ug/m3): 10,700
 MAGLC (ug/m3): 18,700
 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 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 will not make the change. Changes that can affect the parameters used in applying the "Air Toxics Policy" include the following:

- i. 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;
- ii. 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
- iii. 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 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. 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.

B. Operational Restrictions

1. The average temperature of the exhaust gases from the condenser, for any 3-hour block of time, shall not be greater than 43 degrees Fahrenheit.
2. All diluent solvents and reactant chemicals shall be properly held in closed containers at all times when not in use. The condensate from the condenser shall be properly collected in a closed vessel and transferred to a closed storage drum for disposal as hazardous waste. All solvent used for cleanup in this emissions unit shall be properly piped directly from the closed reactor to a closed storage drum for disposal as hazardous waste.
3. The permittee shall not use any photochemically reactive materials, as defined by OAC rule 3745-21-01(C)(5), in this emissions unit.

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 of the exhaust gases from the condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within + 1 percent of the temperature being measured or + 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall collect and record the following information each day:
 - a. The average temperature of the exhaust gases from the condenser during each of the 8 3-hour blocks of time during the day.
 - b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permittee shall maintain weekly records of the following information for this emissions unit:
 - a. the company identification of each liquid organic material, including cleanup material, employed in this emissions unit; and
 - b. whether or not each liquid organic material, including cleanup material, employed is a photochemically reactive material.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the emissions unit, if changed as outlined above in section A.2, will still 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. where 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.

D. Reporting Requirements

1. The permittee shall submit temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature of the exhaust gases from the condenser exceeded the temperature limitation specified above.
2. The permittee shall submit deviation reports which identify the weeks during which photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted during each such week, in pounds.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition 3 of this permit.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following method:

Emission Limitations: 185 pounds/week and 4.8 tons/year of OCs

Applicable Compliance Method: The OC emission limitations are based upon the emission unit's potential to emit:

$$\text{PTE[OCs]}_w = (\text{EF}) \times (\text{PCmax})$$

$$\text{PTE[OCs]}_y = (\text{PTE[OCs]}_w) \times (52 \text{ weeks/year}) \times (1 \text{ ton}/2000 \text{ pounds}).$$

Where:

PTE[OCs]_w = 185 pounds of OCs/week [weekly potential to emit OCs];

PTE[OCs]_y = 4.8 tons of OCs/year [yearly potential to emit OCs];

EF = 26.4 pounds of OCs/finished batch [emission factor based on application data]; and

PCmax = 7 finished batches/week [maximum rated production capacity].

F. **Miscellaneous Requirements**

1. None