

**SPECIAL TERMS AND CONDITIONS**  
**Aircraft Braking Systems**  
**PTI #16-1852**

**A. Applicable Emissions Limitations and/or Control Requirements**

1. The emissions of organic compounds (VOCs) shall not exceed 7.5 tons per year for each emissions unit and 5.0 pounds per hour.
2. The emissions of acetic acid and phosphoric acid shall not exceed 7.5 and 2.5 tons per year respectively.
3. The hourly emissions of acetic acid and phosphoric acid shall not exceed 5.0 and 0.8 pounds per hour respectively.

**B. Operational Restriction**

1. The permittee shall not employ any photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit.

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

1. The permittee shall collect and record the following information for each day for the coating operation:
  - (a) The company identification for each coating and cleanup material employed.
  - (b) The number of gallons of each coating and cleanup material employed, and if coating contains photochemically reactive solvents or not.
  - (c) The organic compound content of each coating and cleanup material, in pounds per gallon.
  - (d) The total organic compound emission rate for all coatings and cleanup materials, in pounds per day.
  - (e) The total number of hours the emissions unit was in operation.
  - (f) The average hourly organic compound emission rate for all coatings and cleanup materials, i.e., (d)/(e), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

2. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of three years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.
3. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
  - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and
  - b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

**C. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports which include the following information:

An identification of each day during which the average hourly total organic compound emissions exceeded 5.0 pounds per hour, and the actual average hourly organic compound emissions for each such day.
2. The permittee shall submit deviation (excursion) reports which include an identification of each day during which any photochemically reactive coatings and/or materials were employed, and the actual average daily organic compound emissions for each such day.
3. The permittee shall also submit annual reports which specify the total organic compound emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 15 of each year.
4. The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Reports of any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. These reports shall be submitted within 30 days of the record, report or calculation indicating the deviation (excursion) had taken place. (These reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

#### **D. Testing Requirements**

1. Compliance with the emission limitations in PTI #16-1852 shall be determined in accordance with the following methods:

- a. **Emission Limitation:**

acetic acid and phosphoric acid emissions of 7.5 and 2.5 tons per year respectively.

acetic acid and phosphoric acid emissions of 5.0 and 0.8 pounds per hour respectively.

#### **Applicable Compliance Method:**

Applicable Compliance Method:

Monthly records shall be maintained of the Acetic Acid and Phosphoric Acid content of each coating and cleanup material employed, the monthly usage of each coating and cleanup material employed, and the calculated average hourly Acetic Acid and Phosphoric Acid emission rate for all coatings and cleanup materials employed. Formulation data shall be used to determine the Acetic Acid and Phosphoric Acid content of each coating and cleanup material.

**b. Emission Limitation:**

7.5 tons per year organic materials.  
5.0 pounds per hour organic materials

**Applicable Compliance Method:**

Applicable Compliance Method:

Monthly records shall be maintained of the organic content of each coating and cleanup material employed, the monthly usage of each coating and cleanup material employed, and the calculated average hourly organic material emission rate for all coatings and cleanup materials employed. Formulation data shall be used to determine the organic material content of each coating and cleanup material.

**c. Operational Restriction:**

use of no photochemically reactive materials

**Applicable Compliance Method:**

For the purpose of demonstrating compliance with the operational restriction referenced above, monthly records shall be maintained that record the usage of all cleanup solvents and coatings employed in the individual coating lines, and whether the coatings used were photochemically reactive or not. Formulation data shall be used to determine if any photochemically reactive materials are employed.

**E. Miscellaneous Requirements**

This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each

pollutant:

Pollutant: **Acetic Acid**

TLV (ug/m3): 25

Maximum Hourly Emission Rate (lbs/hr): 5.0

Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 233.5

MAGLC (ug/m3): 595.0

Pollutant: Phosphoric Acid

TLV (mg/m3): 1

Maximum Hourly Emission Rate (lbs/hr): 0.8

Predicted 1 Hour Maximum Ground-Level Concentration (ug/m3): 23.44

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 23.81

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- 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 specified in the above table;
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and
- d. changes in the composition of the materials, or use of new materials, that would

result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.