Facility ID: 1318008048 Issuance type: Title V Proposed Permit

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 III" and before "I. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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**Part II - Specific Facility Terms and Conditions**

a **State and Federally Enforceable Section**

1. None

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b **State Only Enforceable Section**

1. The following insignificant emissions units are located at this facility:

Z001: Solvent Storage
Z002: Fuel Oil Storage
Z003: Gas Storage
Z004: Stoddard Solvent
Z005: Carpenter Saw
Z006: TCE TempStorage
Z007: Maint Parts Wash
Z008: Anealer
Z009: Solvent Still
Z010: Boiler
Z011: Cooling Tower
Z012: Chip Collectors
Z013: Chip Collector
Z014: Chip Collector
Z015: Chip Collector
Z016: Incinerator

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**Part III - Terms and Conditions for Emissions Units**

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**Facility ID: 1318008048 Emissions Unit ID: L001 Issuance type: Title V Proposed Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| Open top vapor degreaser for parts cleaning | 40 CFR 63.463 | See Additional Terms and Conditions. |
| | 3745-21-09 (O)(3) | Equivalent to or less stringent than MACT |

2. **Additional Terms and Conditions**

(a) The permittee shall ensure that the chilled air blanket temperature (in degrees F), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.

(b) The permittee shall comply with the following requirements:

a. Determine the appropriate dwell time for each type of part or parts basket, or determine the maximum dwell time using the most complex part type or parts basket as described in the "Testing Requirements" section of this permit.

b. Ensure that, after cleaning, each part is held in the solvent cleaning machine freeboard area above the vapor zone for the dwell time determined for that particular part or parts basket, or for the maximum dwell time determined using the most complex part type or parts basket.

(c) The permittee shall comply with the following requirements:

a. Ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine does not exceed 15.2 meters per minute (50 feet per minute) at any time as measured using the procedures outlined in the "Monitoring and/or Record keeping Requirements" section of this permit.

b. Establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less.

(d) The permittee shall employ a reduced room draft that ensures that the flow or movement across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time measured using the procedure described in the "Monitoring and/or Recordkeeping Requirements" section of this permit. The permittee shall establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in the "Monitoring and/or Recordkeeping Requirements" section of this permit.

(e) The solvent cleaning machine shall have a freeboard ratio of 0.75 or greater.

(f) The solvent cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.

(g) The solvent cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.

(h) The solvent cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.

(i) The solvent cleaning machine shall have a primary condenser.

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II. **Operational Restrictions**

1. The permittee shall meet all of the following required work and operational practices:
   a. The parts baskets or the parts being cleaned in solvent cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meter per minute (3 feet per minute) or less.
   b. Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
   c. Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes must be tipped or rotated before being removed from the solvent cleaning machine unless an equally effective approach has been approved by the Director (appropriate field Office or local air agency).
   d. Parts baskets or parts shall not be removed from the solvent cleaning machine until dripping has stopped.
   e. During startup of the solvent cleaning machine, the primary condensers shall be turned on before the sump heater.
   f. During shutdown of the solvent cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
   g. When solvent is added or drained from the solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
   h. The solvent cleaning machine and its associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the satisfaction of the Director (appropriate District Office or local air agency) to achieve the same or better results as those recommended by the manufacturer.
   i. The permittee shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in 40 CFR Part 63, Appendix B if requested during an inspection by the Director (appropriate District Office or local air agency).
   j. Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but must not allow liquid solvent to drain from the container.
   k. Sponges, fabric, wood, and paper products shall not be cleaned.

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

1. The permittee shall monitor the hoist speed as described below:

   a. The permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).

   b. The permittee shall conduct monthly monitoring of the hoist speed. If after the first year, no exceedances of the hoist speed are measured, the permittee may begin monitoring the hoist speed quarterly.

   c. If an exceedance of the hoist speed occurs during quarterly monitoring, the permittee shall return to a monthly monitoring frequency until another year of compliance without an exceedance is demonstrated.

   d. If the permittee can demonstrate to the satisfaction of the Director (appropriate District Office or local air agency) in the initial compliance report that the hoist speed cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.

2. The permittee shall maintain the following records in written or electronic form for the lifetime of the solvent cleaning machine:

   a. Owner's manuals, or if not available, written maintenance and operating procedures for the solvent cleaning machine and control equipment.

   b. The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for the installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.

   c. Records of the halogenated HAP solvent content for the solvent used in the solvent cleaning machine.

   d. Records of the tests required as outlined in the "Testing Requirements" section of this permit to determine an appropriate dwell time for each part or parts basket.

3. The permittee shall maintain the following records in written or electronic form for a period of five years for the solvent cleaning machine:

   a. The results of control device monitoring required in this section of the permit.

   b. Information on the actions taken to comply with 40 CFR 63.463 (e) and (f), including records of written or verbal orders for replacement parts, a description of the repair made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.

   c. Estimates of annual trichloroethylene consumption for the solvent cleaning machine.

4. The permittee shall conduct monitoring and record the results on a weekly basis for the freeboard refrigeration device by using a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.

5. The permittee shall conduct monitoring and record the results on a monthly basis of the actual dwell time. The permittee shall determine the actual dwell time by measuring the period of time that parts are held within the freeboard area of the solvent cleaning machine after cleaning.

6. The permittee shall conduct an initial monitoring test of the wind speed and of room parameters, quarterly monitoring of wind speed, and weekly monitoring of room parameters as specified below:

   a. Measure the wind speed within 6 inches above the top of the freeboard area of the solvent cleaning machine as follows:

      i. Determine the direction of the wind current by slowly rotating a velometer or similar device until the maximum speed is located.

      ii. Orient a velometer in the direction of the wind current at each of the four corners of the machine.

      iii. Record the reading for each corner.

      iv. Average the values obtained at each corner and record the average wind speed.

   b. Monitor on a weekly basis the room parameters established during the initial compliance test that are used to achieve the reduced room draft.

7. The permittee shall maintain records of the initial performance test, including the idling emission rate and values of the monitoring parameters measured during the test. These records shall be maintained for the lifetime of the solvent cleaning machine.

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IV. **Reporting Requirements**

1. The permittee shall submit an exceedance report on a semiannual basis. If no operation conditions were established under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) and/or if the flow of air across the top of the freeboard area of the cleaning machine or within the solvent cleaning machine enclosure exceeded 15.2 meters/minute and no correction was made within 15 days of detection and or if the appropriate dwell time for each type part or parts basket or the maximum dwell time was not determined and if after cleaning, each part was not held in the solvent cleaning machine freeboard area above the vapor zone for the proper or the maximum dwell time for that particular part or parts basket, the permittee shall begin to submit a quarterly report until such time that the permittee requests and receives approval of a less frequent reporting frequency from the Director (appropriate District Office or local air agency). The permittee may receive approval of less frequent reporting if the following conditions are met: (1) The emissions unit has demonstrated a full year of compliance without an exceedance, (2) the permittee continues to comply with all relevant recordkeeping and monitoring requirements specified in 40 CFR 63.1, General Provisions, and (3) the Director (appropriate District Office or local air agency) does not object to a reduced frequency of reporting for the affected emissions unit as provided in paragraph (e) (3) (iii) of subpart A, 40 CFR 63.1, General Provisions. Each exceedance report shall be delivered or post marked by the 30th day following the reporting period. Each exceedance report shall contain the following:

   a. The reason and a description of the exceedance and action(s) taken to comply with 40 CFR 63.463 (e) and (f) including written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.

   b. If no exceedance has occurred, a statement to that effect shall be submitted.

2. The permittee shall submit an annual report by February 1. Each annual report shall contain the following:

   a. A signed statement from the facility owner or their designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required pursuant to 40 CFR 60.463 (d) (10)."

   b. An estimate of solvent consumption during the reporting period.

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V. **Testing Requirements**

1. The permittee shall determine the appropriate dwell time for each part or parts basket using the following procedures:
   a. Determine the amount of time for the part or parts basket to cease dripping once placed in the vapor zone. The part or parts basket used for this determination must be at room temperature before being placed in the vapor zone.
   b. The proper dwell time for parts to remain in the freeboard area above the vapor zone is no less than 35 percent of the time determined in paragraph (1) (a) of this section.

2. The permittee shall determine the facility's potential to emit (PTE) from all solvent cleaning operations. A facility's total PTE is the sum of the HAP emissions from all solvent cleaning operations plus all HAP emissions from other emissions units from within the facility. The potential to emit shall be determined in accordance with the following procedures:
   a. Determine the potential to emit for each individual solvent cleaning machine using the following equation:

PTEi = Hi X Wi X SAIi

Where:

PTEi = the potential to emit for the solvent cleaning machine i (kilograms solvent per year).

Hi = hours of operation for solvent cleaning machine i (hours per year).

= 8760 hours per year, unless otherwise restricted by a federally enforceable requirement.

Wi = the working mode uncontrolled emission rate (kilograms per square meter per hour).

= 1.95 kilograms per square meter per hour for batch vapor and cold cleaning machines.

= 1.12 kilograms per square meter per hour for in-line cleaning machines.

SAIi= solvent/air interface area of solvent cleaning machine i (square meters). Section 63.461 defines the solvent/air interface area for those machines that have a solvent /air interface. Cleaning machines that do not have a solvent area interface shall calculate a solvent/air interface area using the procedure in paragraph (b) below.
b. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the following equation:

SAI = 2.2 * (Vol)^0.6

Where:

SAI = the solvent/air interface area (square meters).

Vol = the cleaning capacity of the solvent cleaning machine (cubic meters).
c. Sum the PTEi for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

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VI. **Miscellaneous Requirements**

1. None

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**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **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.

| Operations, Property, and/or Equipment | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|

2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None