

Central Ohio Welding Industries  
PTI 01-7330  
Trichloroethylene batch cold cleaner (L001)

#### ADDITIONAL TERMS AND CONDITIONS

##### A. Operational Restrictions

1. The permittee shall restrict the usage of trichloroethylene to no more than 103 gallons/month.
2. The permittee shall maintain the temperature of the bath at less than or equal to 118 degrees Fahrenheit at all times.
3. The cold cleaner shall be operated with a cover, and if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute, measured at 100 degrees Fahrenheit or, if the solvent is heated or agitated, the cover shall be designed and constructed so that it can be easily operated with one hand.
4. The cold cleaner shall be equipped with a device for draining the cleaned parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit, the drainage facility shall be constructed internally so that parts are enclosed under the cover during draining, unless an internal type drainage device cannot fit into the cleaning system.
5. The cold cleaner shall employ a tightly fitting cover that shall be closed at all times except during parts entry and removal and a freeboard ratio of 0.75 or greater.
6. The cold cleaner shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:
  - (a) Provide a permanent, legible, conspicuous label, summarizing the operating requirements.
  - (b) Store waste solvent in covered containers.
  - (c) Close the cover whenever parts are not being handled in the cleaner.
  - (d) Drain the cleaned parts until dripping ceases.
  - (e) If used, supply a solvent spray that is a solid fluid stream (not a fine, atomized, or shower-type spray) at a pressure that does not exceed 10 pounds per square inch gauge.

(f) Clean only materials that are neither porous nor absorbent.

7. The permittee shall comply with the following work and operational practice requirements:

- a. All waste solvent shall be collected and stored in closed containers. The closed container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.
- b. If a flexible hose or flushing device is used, flushing shall be performed only within the freeboard area of the solvent cleaning machine.
- c. The permittee shall drain solvent cleaned parts for 15 seconds or until dripping has stopped, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while draining.
- d. The permittee shall ensure that the solvent level does not exceed the fill line.
- e. Spills during solvent transfer shall be wiped up immediately. The wipe rags shall be stored in covered containers meeting the requirements of paragraph (1) (a) above.
- f. When an air- or pump-agitated solvent bath is used, the permittee shall ensure that the agitator is operated to produce a rolling motion of the solvent, but not observable splashing against tank walls or parts being cleaned.
- g. The permittee shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip.
- h. Sponges, fabric, wood, and paper products shall not be cleaned.

#### B. Monitoring and Recordkeeping Requirements

1. The permittee shall maintain monthly records of the gallons of trichloroethylene employed in L001 and the amount of trichloroethylene drummed for off-site removal.
2. The permittee shall maintain a temperature monitor which provides the temperature of the solvent bath 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  $\pm 1$  percent of the temperature being measured or  $\pm 5$  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.

#### C. Reporting Requirements

1. The permittee shall submit temperature deviation (excursion) reports that identify all exceedences of the temperature of the bath exceeded the temperature limitation specified in A.2., above.
2. The permittee shall submit annual reports that identify all exceedences of the monthly usage restriction specified in A.1., above, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year.

#### D. Compliance Determination

1. Compliance with the emission limitation of these terms and conditions shall be determined in accordance with the following method(s):

(a) Emission Limitation

3.24 lbs VOC/hr, 7.0 tons OC/year

Applicable Compliance Method

The hourly emission rate shall be determined by taking the monthly usage in gallons divided by the hours of operation times the density of 12.27 lbs trichloroethylene/gallon. The maximum assumes 103 gallons usage and 480 hours of operation.

The annual emission rate shall be based on summing the monthly usage in gallons minus the number of gallons drummed for off-site removal during each rolling twelve-month period times the density of 12.27 lbs trichloroethylene/gallon. The maximum assumes 103 gallons/month and 100 gallons/year recycled minimum.

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:

$$PTE_i = H_i \times W_i \times SAI_i$$

Where:

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

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

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

$W_i$  = 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.

$SAI_i$  = 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 PTE<sub>i</sub> for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.