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Facility Name: **Central Ohio Welding Industries**

Application Number: **01-7330**

Date: **November 18, 1998**

**GENERAL PERMIT CONDITIONS**

**TERMINATION OF PERMIT TO INSTALL**

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**NOTICE OF INSPECTION**

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

**CONSTRUCTION OF NEW SOURCES**

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as

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an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

### **PERMIT TO INSTALL FEE**

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

### **PUBLIC DISCLOSURE**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

### **APPLICABILITY**

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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### **BEST AVAILABLE TECHNOLOGY**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

### **PERMIT TO OPERATE APPLICATION**

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

### **SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION**

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Central Ohio Welding Industries** located in **Franklin** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
L001	Trichloro-ethylene batch cold cleaner	Compliance with applicable rules and regulations and monthly usage restriction	3745-31-05 3745-21-09 (0) 40 CFR 63 Subpart T	3.24 pounds Trichloro-ethylene/hour, 7.0 tons, Trichloro-ethylene/year usage restriction to less than 103 gallons per month, and See Additional Special Terms and Conditions.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant

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VOC	<u>Tons/Year</u>
	7.0

#### **REPORTING REQUIREMENTS**

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Ohio EPA, Central District Office, 3232 Alum Creek Drive, Columbus, OH 43207-3417.**

#### **WASTE DISPOSAL**

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

#### **MAINTENANCE OF EQUIPMENT**

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

#### **MALFUNCTION/ABATEMENT**

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Ohio EPA, Central District Office, 3232 Alum Creek Drive, Columbus, OH 43207-3417.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled

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maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

#### **AIR POLLUTION NUISANCES PROHIBITED**

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

#### **BAT FOR COLD CLEANERS**

In accordance with OAC Rule 3745-21-09(0)(2), each owner or operator of a cold cleaner shall:

- a. equip the cold cleaner with either:
  1. a cover - if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute measured at 100°F or the solvent is heated or agitated, the cover shall be signed and constructed so that it can be easily operated with one hand; or
  2. a remote solvent reservoir from which solvent is pumped through a nozzle suspended over a sink-like work area which drains back to the reservoir, provided a sink-like work area has an open drain area of less than 16 square inches and provided the solvent is neither heated above 120 degrees Fahrenheit nor has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit;
- b. equip the cold cleaner with a device for draining the cleaned parts - 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;
- c. install one of the following devices if the solvent vapor pressure is greater than 0.6 pound per square inch absolute

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measured at 100 degrees Fahrenheit, or if the solvent is heated above 120 degrees Fahrenheit;

1. freeboard that gives a freeboard ratio greater than or equal to 0.7;
  2. water cover (solvent must be insoluble in and heavier than water); or
  3. other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Director; and
- d. operate and maintain the cold cleaner in a manner which is consistent with good engineering practice and which minimizes solvent evaporation from the unit.

#### **ADDITIONAL SPECIAL 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 188 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

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- 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; and,
  - 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;

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- 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; and,
- 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.

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**C. Reporting Requirements**

1. The permittee shall submit temperature deviation (excursion) reports that identify all exceedances 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 exceedances 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 VOC/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 per month.

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:

$$\text{PTE}_i = \quad H_i \times W_i \times \text{SA}_i$$

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Where:

PTE<sub>i</sub> = the potential to emit for the solvent cleaning machine *i*  
(kilograms solvent per year).

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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.

SAli = 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.