Facility Name: **STADCO AUTOMATICS**
Application Number: **08-3944**
Date: **Draft PTI (Date will be entered upon final issuance)**

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

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.

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.

Facility Name: **STADCO AUTOMATICS**
Application Number: **08-3944**
Date: **Draft PTI (Date will be entered upon final issuance)**

Ohio EPA Source Number	Source Identification Number	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **STADCO AUTOMATICS** located in **Greene** 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.

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
L003	Open top vapor degreaser	*	3745-31-05	0.25 ton/month and 3.03 TPY volatile organic compounds
			NESHAP 40 CFR Part 63, Subpart T	See terms and conditions of this permit
			3745-21-09 (O)(3)	See Additional Special Term and Condition A.3.

* BAT is compliance with the applicable state and federal rules; compliance with the specified allowable emission limits and the Halogenated Solvent Cleaning NESHAP (MACT) standard; recordkeeping; and reporting.

Facility Name: **STADCO AUTOMATICS**
Application Number: **08-3944**
Date: **Draft PTI (Date will be entered upon final issuance)**

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
volatile organic compounds	3.03

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Regional Air Pollution Control Agency, Montgomery County Health Department, 451 West Third Street, P.O. Box 972, Dayton, Ohio 45422.**

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.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

Facility Name: **STADCO AUTOMATICS**
Application Number: **08-3944**
Date: **Draft PTI (Date will be entered upon final issuance)**

A. Additional Terms and Conditions

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

2. The permittee shall maintain a freeboard with a freeboard ratio equal to 1.0 or greater.

3. The open top vapor degreaser shall employ a cover and safety switches as described below:

   a. a cover that can be opened and closed easily without disturbing the vapor zone;

   b. a condenser flow switch and thermostat or any other device which shuts off the sump heat if the condenser coolant is either not circulating or too warm;

   c. a vapor level control thermostat or any other device which shuts off the sump heat when the vapor level rises too high;

   d. a water flow switch, water pressure switch, or any other device which shuts off the sump heat if the water in a water-cooled condenser has no flow or no pressure, whichever is being monitored; and,

   e. if the open top vapor degreaser opening is greater than 10 square feet, the cover must be powered or equipped with mechanical features whereby it can be readily closed when the degreaser is not in use;

4. The permittee shall submit an initial notification report as soon as practicable before the construction or reconstruction is planned to commence. This report shall include all of the information required in 40 CFR 63.5(d)(1) of subpart A, with the following revisions and additions:

a. the report shall include a brief description of the solvent cleaning machine type (batch vapor, batch cold, vapor in-line, or cold in-line), solvent/air interface area, and existing controls;

b. the report shall include the anticipated compliance approach for the solvent cleaning machine; and,

c. the report shall include an estimate of the annual trichloroethylene consumption for the solvent cleaning machine in lieu of the requirements of 40 CFR 63.5(d)(1)(ii)(H), subpart A.

B. Operational Restrictions

1. General Design Requirements
The permittee shall ensure that the solvent cleaning machine conforms to the following design requirements:

a. use of an idling and downtime mode cover that shall be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place. The cover must be able to be readily opened or closed, must completely cover the cleaning machine openings when in place, and must be free of cracks, holes and other defects;

b. the solvent cleaning machine shall have a freeboard ratio of 1.0 or greater;

c. 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;

d. 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;

e. 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; and,

f. the solvent cleaning machine shall have a primary condenser.

2. The permittee shall meet all of the following required work and operational practices:

a. control air disturbances across the solvent cleaning machine opening(s) by incorporating the following control equipment or techniques: cover(s) for the solvent cleaning machine shall be in place during the idling mode and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place;

b. 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 (Regional Air Pollution Control);

c. parts baskets or parts shall not be removed from the solvent cleaning machine until dripping has stopped;

d. during startup of the solvent cleaning machine, the primary condensers shall be turned on before

the sump heater;

e. 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;

f. 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;

g. 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 (Regional Air Pollution Control) to achieve the same or better results as those recommended by the manufacturer;

h. 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 (Regional Air Pollution Control);

i. 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; and,

j. sponges, fabric, wood, and paper products shall not be cleaned.

3. The permittee shall operate and maintain a refrigerated chiller for the open top vapor degreaser.

4. The open top vapor degreaser shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:

a. keep the cover closed at all times except when processing work loads through the degreaser;

b. minimize solvent carry-out by:

   i. racking parts so that solvent drains freely and is not trapped;

   ii. moving parts in and out of the degreaser at less than 11 feet per minute;

   iii. holding the parts in the vapor zone at least 30 seconds or until condensation ceases, whichever is longer;

   iv. tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and,

   v. allowing parts to dry within the degreaser for at least 15 seconds or until visually dry, whichever is longer.

c. clean only materials that are neither porous nor absorbent;

d. occupy no more than one-half of the degreaser's open-top area with a workload;

e. repair solvent leaks immediately, or shut down the degreaser;

f. store waste solvent only in covered containers;

g. operate the cleaner such that water cannot be visually detected in solvent exiting the water separator;

h. use no ventilation fans near the degreaser opening;

i. when the cover is open, do not expose the open top

vapor degreaser to drafts greater than 131 feet per minute, as measured between 3 and 6 feet upwind and at the same elevation as the tank lip; and,

j. provide a permanent, conspicuous label, summarizing the operating procedures.

C. Monitoring and/or RecordKeeping Requirements

1. 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.

2. The permittee shall maintain monthly records of the following information:

   a. the types of solvents employed in the open top vapor degreaser;

   b. the number of gallons of solvent employed;

   c. the number of gallons of solvent disposed as waste; and,

   d. all control equipment maintenance.

3. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five 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.

4. 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; and,

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

5. 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) 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.

D. Reporting Requirements

1. The permittee shall submit an initial statement of compliance no later than 150 days after startup. Each initial statement of compliance shall contain the following:

a. the name and address of the permittee;

b. the address (i.e., physical location) of the solvent cleaning machine;

c. a list of the control equipment used to achieve compliance; and,

d. a list of the parameters that are monitored and the values of these parameters measured on or during the first month after the compliance date for each piece of control equipment required to be monitored.

2. The permittee shall submit an annual report by February 1 of each year for the preceding year. 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 63.463 (d) (10)."; and,

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

3. The permittee shall submit an exceedance report on a semiannual basis.

If the cover did not completely cover the cleaning machine openings when in place whenever parts were not in the solvent cleaning machine and/or if the cover had cracks, holes or other defects and no correction was made within 15 days of detection;

If the temperature of the chilled air blanket, measured at the center of the air blanket, was greater than 30% of the solvent's boiling point, and no correction was made within 15 days of detection;

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 (Regional Air Pollution Control). 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 (Regional Air Pollution Control) 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) 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.

E. Testing Requirements and Compliance Determinations

1. 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:

      $PTEi = Hi * Wi * SAIi$

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.

2. Compliance with the emission limitation in these terms and conditions shall be determined in accordance with the following method:

a. Emission Limitation
0.25 ton/month volatile organic compounds

Applicable Compliance Method
To determine the actual organic compound emission rate, the following equation shall be used:

E = (Ls - Lw) * D/(2000 pounds/ton)

Where:

E = volatile organic compound emission rate (ton/month)

Ls = liquid volume of trichloroethylene solvent employed each month (gallons)

Lw = liquid volume of trichloroethylene solvent sent off-site as waste each month (gallons)

D = denisty of trichloroethylene solvent

(pounds/gallon)

b. Emission Limitation
3.03 TPY volatile organic compounds

Applicable Compliance Method
Compliance shall be the sum of the monthly volatile organic compound emission rates for the calendar year.