OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

Re: Permit to Install
Lake County
Application No: 02-1240
NESHAP
SYNTHETIC MINOR

CERTIFIED MAIL

FINAL

March 25, 1998

CONCORDE CASTINGS, INC
NOBBY BOYK
34000 LAKELAND BLVD
EASTLAKE, OH 44095

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations & Permit Section
Division of Air Pollution Control

cc: US EPA
NORTHEAST DISTRICT OFFICE, DAPC
LAKE COUNTY HEALTH DEPT.

State of Ohio Environmental Protection Agency

Permit to Install
Terms and Conditions

Application No. 02-1240
APS Premise No. 0243011312
Permit Fee: $400.00

Name of Facility: CONCORDE CASTINGS, INC

Person to Contact: NOBBY BOYK

Address: 34000 LAKELAND BLVD
EASTLAKE, OH 44095

Location of proposed source(s): 34000 LAKELAND BOULEVARD
EASTLAKE, OHIO

Description of proposed source(s):
A TRICHLOROETHYLENE VAPOR DEGREASER; MODEL VD/S-36A.

Date of Issuance: March 25, 1998

Effective Date: March 25, 1998

The above named entity is hereby granted a permit to install for the above described source(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described source(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Donald R Schregardus

Director

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.

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for CONCORDE CASTINGS, INC located in Lake County. The sources 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
L001	A trichloro-ethylene batch vapor degreaser; (Model VO/S-36A)	Allowable emissions rate for Trichloro-ethylene determined per formula in 40 CFR 63.464; operations of emissions unit limited to 6,000 hours per rolling 12-month period; Compliance with applicable Federal MACT standards.	3745-31-05 40 CFR 63.464 3745-21-09 (O)(3) and 40 CFR Part 63, Subpart T (NESHAP/MACT standards for halogenated degreasing)	VOC (Trichloroethylene) emissions limited to 2.39 pounds/hour and 7.17 TPY See Additional Special Terms and Conditions

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
VOC's	7.17

NESHAP REQUIREMENTS

The following source(s) are subject to the applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 61.

Source No.	Source Description	NESHAP Regulation
L001	Trichloroethylene Degreaser	40 CFR, Part 63, Subpart T

The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 61 are also federally enforceable.

Pursuant to the NESHAP, the source owner/operator is required to report the following milestones:

a. date of commencement of construction (no later than 30 days after such date);
b. anticipated date of initial start-up (not more than 60 days or less than 30 days prior to such date);
c. actual date of initial start-up (within 15 days after such date); and
d. date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
Division of Air Pollution Control
Permit Management Unit
P.O. Box 1049
Columbus, OH 43216-1049

and OEPA Northeast District Office - DAPC
2110 East Aurora Road
Twinsburg, Ohio 44087

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to OEPA Northeast District Office - DAPC, 2110 East Aurora Road, Twinsburg, Ohio 44087.

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.

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.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. INTRODUCTION

This emissions unit is a small, open-top vapor degreaser which utilizes trichloroethylene as a solvent; as such, it is subject to the MACT standards found in 40 CFR Part 63 Subpart T. This vapor degreaser has a surface/air interface of 6.0 square feet, a freeboard ratio of 0.75, and utilizes both a manual working/idling mode cover and the idling emissions limit standard to regulate solvent emissions. It is used by Concorde Castings to clean metal parts prior to shipping.

This emissions unit requires permitting as a synthetic minor source to avoid Title V requirements based on MACT Standard potential to emit calculations, and shall be required to comply with specific federally enforceable emissions limits and operating restrictions as listed below.

B. EMISSIONS LIMITATIONS

1. Per OAC 3745-31-05, mass emissions of trichloroethylene from this emissions unit shall be limited to no more than 2.39 pounds/hour and 7.17 TPY. Annual emissions of trichloroethylene from this facility, including 0.25 TPY from a ceramic mixing process, are limited to 7.42 tons.

2. Per 40 CFR Part 63 Subpart T and OAC 3745-21-09(O)(3), the following emissions controls and/or control systems shall be employed to minimize solvent emissions from this emissions unit:

   a. the solvent cleaning machine shall be designed and operated to accommodate the 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 0.75 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.

3. The permittee shall demonstrate that the solvent cleaning machine can achieve and maintain an idling emission limit of 0.22 kilograms per hour per square meter (0.045 pound per hour per square foot) of solvent/air interface area as determined using the procedures in 40 CFR 63.465 (a) and 40 CFR 63, Appendix A.

4. The permittee shall perform the following activities:

a. conduct an initial performance test to demonstrate compliance with the applicable idling emission limit and to establish parameters that will be monitored to demonstrate compliance;

b. conduct the periodic monitoring of the parameters used to demonstrate compliance as described in the "Monitoring and/or Recordkeeping Requirements" section of this permit; and,

c. operate the solvent cleaning machine within the parameters identified in the initial performance test.

5. The permittee shall comply with the following requirements:

a. ensure that the cover opens only for part entrance and removal and completely covers the cleaning machine openings when closed; and,

b. ensure that the working-mode cover is maintained free of cracks, holes and other defects.

C. <u>OPERATIONAL RESTRICTIONS</u>

1. The permittee shall operate (i.e., open-top vapor degreaser turned on and available to accept parts, etc., for treatment) this emissions unit for no more than 6000 hours during any rolling 12-month period. During the first 12 months of operation under this permit, the cumulative monthly operating hours of this emissions unit shall not exceed those listed in the following table:

Months:	Cumulative Total Hours of Operation:
1-1	500
1-2	1000
1-3	1500
1-4	2000
1-5	2500
1-6	3000
1-7	3500
1-8	4000
1-9	4500
1-10	5000
1-11	5500
1-12	6000

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 employing, as a control technique, the use of a 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. 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;

   c. 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);

   d. 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 (Ohio EPA, Northeast District Office);

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

   f. during startup of the solvent cleaning machine, the primary condensers shall be turned on before the sump heater;

   g. 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;

h. 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;

i. 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 (Ohio EPA, Northeast District Office) to achieve the same or better results as those recommended by the manufacturer;

j. 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 (Ohio EPA, Northeast District Office);

k. 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,

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

D. MONITORING AND/OR RECORDKEEPING 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; and,

d. if the permittee can demonstrate to the satisfaction of the Director (Ohio EPA, Northeast District Office) 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; and,

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

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; and,

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

4. 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.

5. The permittee shall conduct monitoring and record the results on a monthly basis for the working-mode/idling-mode cover by conducting a visual inspection to determine

if the cover is opening and closing properly, completely covers the cleaning machine openings when closed, and is free of cracks, holes and other defects.

6. On a monthly basis, the permittee shall monitor and record the following information relative to the operation of this emissions unit:

   a. the total hours of operation of this emissions unit for the month;

   b. the cumulative total hours of operation of this emissions unit on a rolling 12-month basis;

   c. the volume of trichloroethylene solvent consumed during the month; and,

   d. the average hourly rate of emissions of trichloroethylene during the month as determined by multiplying the monthly volume of solvent consumed (in gallons) by the density of trichloroethylene (12.1 pounds per gallon) and dividing by the total hours of emissions unit operation during the month.

E. <u>REPORTING REQUIREMENTS</u>

1. 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.

2. The permittee shall submit an initial statement of compliance no later than 150 days after December 2, 1997. 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;

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; and,

e. conditions to maintain the wind speed requirements as described in the "Additional Special Terms and Conditions" section of this permit.

3. 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 60.463 (d) (10)";

b. the annual volume of solvent consumption (in gallons) for this emissions unit; and,

c. the total annual hours of operation of this emissions unit.

4. The permittee shall submit an exceedance report on a semiannual basis. If the following exceedances occur, 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 (Ohio EPA, Northeast District Office):

a. if, during the working-mode, the cover, when closed, did not completely cover the cleaning machine openings or the cover was open at times other than for parts entrance or removal and/or the cover had cracks, holes or other defects, and no correction was made within 15 days of detection; or,

b. if, during the idling-mode, 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; or,

c. if the rolling 12-month cumulative total hours of operation of this emissions unit exceeds 6000.

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 (Ohio EPA, Northeast District Office) 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; and,

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

5. The permittee shall submit a test report for tests of idling emissions meeting the specifications in Method 307 of 40 CFR Part 63, Appendix A (or an alternative method of measuring idling emissions approved by the U.S. EPA Administrator). This report shall comply with the following requirements:

a. the test must be conducted on the same specific model solvent cleaning machine used at the facility. The test can be done by the permittee of the affected machine or can be supplied by the vendor of that solvent cleaning machine or a third party. If a solvent cleaning machine vendor or a third party test report is used to demonstrate compliance, the following requirements shall be met:

i. the report shall include the following for the solvent cleaning machine tested: name of person(s) or company that performed the test, model name, the date the solvent cleaning machine was tested, serial number, and a diagram of the solvent cleaning machine tested; and,

ii. the permittee shall comply with the following requirements:

aa. submit a statement by the solvent cleaning machine vendor that the unit tested is the same as the unit the report is being submitted for; and,

ab. demonstrate to the satisfaction of the Director (Ohio EPA, Northeast District Office) that the trichloroethylene emissions from the solvent cleaning machine for which the test report is being submitted are equal to or less than the trichloroethylene emissions from the solvent cleaning machine in the vendor test report.

b. the report must clearly state the monitoring parameters, monitoring frequency and the delineation of exceedances for each parameter.

F. TESTING REQUIREMENTS

1. The permittee shall determine the idling emission rate of the solvent cleaning machine using Reference Method 307 in 40 CFR part 63, Appendix A (or an alternative method of measuring idling emissions approved by the U.S. EPA Administrator).

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:

$$PTEi = Hi \times Wi \times SAIi$$

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 (in the case of this emissions unit, use the federally enforceable operating restriction of 6000 hours).

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.

3. Compliance with the emissions limitations, as listed above in these terms and conditions, shall be determined in accordance with the following methods:

Emissions

Mass emissions of trichloroethylene shall not exceed 2.39 pounds/hour and 7.17 TPY.

Applicable Compliance Method

Calculations based on a compilation of emissions unit operations data recorded and reported as required in these terms and conditions. The emissions rate (pounds/hour) shall be determined by multiplying the monthly volume of trichloroethylene consumption (in gallons) by the density of this solvent (12.1 pounds per gallon) and dividing this value by the monthly cumulative total hours of emissions unit operation. The annual total emissions of trichloroethylene shall be determined by calculating the weighted average hourly emission rate

(based on monthly average emissions rate and the monthly volume of solvent consumption) and multiplying this value by the cumulative total annual hours of operation for this emissions unit.