



State of Ohio Environmental Protection Agency

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122 S. Front Street

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Lazarus Gov. Center
P.O. Box 1049

**RE: DRAFT PERMIT TO INSTALL MODIFICATION CERTIFIED MAIL
SUMMIT COUNTY
Application No: 16-1877**

DATE: November 23, 1999

Thermo-Rite Mfg. Co.
Keith E Kleve
PO Box 1108
Akron, OH 44309

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$ 100** will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

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

cc: USEPA
AKRON REGIONAL AIR QUALITY MANAGEMENT

Permit to Install
Terms and Conditions

Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

DRAFT ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 16-1877

Application Number: 16-1877
APS Premise Number: 1677010540
Permit Fee: **\$ 100**
Name of Facility: Thermo-Rite Mfg. Co.
Person to Contact: Keith E Kleve
Address: PO Box 1108
Akron, OH 44309

Location of proposed air contaminant source(s) [emissions unit(s)]:
1355 Evans Avenue
Akron, OHIO

Description of proposed emissions unit(s):
BATCH VAPOR DEGREASER.

The reason for the modification is:
Modification to PTI #16-1877 issued 05/12/99 to allow for change in method of compliance for the halogenated batch vapor degreaser; pgs 6, 7, 8, 9, 10, 11, 12, 13 of 15 pages.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS**A. Permit to Install General Terms and Conditions****1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

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 this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. 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.

9. Construction of New Sources(s)

The proposed emissions unit(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 emissions unit(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 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 prove to be inadequate or cannot meet applicable standards.

10. 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.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. 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.

13. Source Operation and Operating Permit Requirements 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, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after

commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	1.2

Part II: Special Terms and Conditions

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or <u>Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Detrex Open-Top Vapor Degreaser	OAC rule 3745-31-05	0.1 ton/month organic compounds (OC) 1.2 tons/yr OC
	OAC rule 3745-21-09(O)	See A.2.a below.
	40 CFR Part 63 Subpart T	See A.2.b below.

2. Additional Terms and Conditions

- 2.a Although the requirements of OAC rule 3745-21-09(O) allow for an exemption from applicable requirements in OAC rule 3745-21-09(O)(2) through (O)(5), the exemption allowed in accordance with OAC rule 3745-21-09(O)(6)(b) is not part of the federally approved SIP. The rule has been revised by the Ohio EPA to specify that a solvent metal cleaning operation which is subject to 40 CFR Part 63, Subpart T is exempt from the requirements of OAC rule 3745-21-09(O)(2) through (O)(5), provided the requirements of Subpart T are specified in the terms and conditions of the Title V permit. The Ohio EPA has received confirmation from the USEPA of the acceptability of the exemption; therefore, the requirements of OAC rule 3745-21-09(O) will not be cited in the Title V permit.
- 2.b The permittee shall ensure that the trichloroethylene monthly emissions from the solvent cleaning machine do not exceed a 3-month, rolling average limit of 150 kilograms/square meter/month.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain a log of solvent additions and removals for the solvent cleaning machine.
2. The permittee shall demonstrate compliance with the 3-month rolling average monthly emissions of less than or equal to 150 kilograms/square meters/month on a monthly basis as follows:
 - a. the permittee shall, on the first operating day of every month, ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.
 - b. the permittee shall on the first operating day of the month comply with the following:
 - i. using the records of solvent additions and removals for the previous monthly reporting period, determine trichloroethylene emissions using the appropriate equation specified in the "Testing Requirements" section of this permit;
 - ii. determining the total amount of trichloroethylene removed from the solvent cleaning machine in solid waste during the most recent monthly reporting period (kilograms of solvent per month) as specified in the "Testing Requirements" section of this permit; and,
 - iii. determining the monthly rolling average for the 3-month period ending with the most recent reporting period using the appropriate equation specified in the "Testing Requirements" section of this permit.
3. The permittee shall maintain the following records either in electronic or written form for a period of five years:
 - a. the dates and amounts of trichloroethylene that are added to the solvent cleaning machine;

- b. the trichloroethylene composition of wastes removed from the cleaning machines using the procedures described in the "Testing Requirements" section of this permit; and,
 - c. calculation sheets showing how the monthly emissions and the rolling, 3-month average emissions of trichloroethylene from the solvent cleaning machine were determined, and the results of all calculations;
4. The permittee shall maintain the following monthly records for the open-top vapor degreaser:
- a. the name and identification of each solvent employed;
 - b. the total number of gallons of solvent employed;
 - c. the number of gallons of waste solvent (solvent content only, excluding any solids and water) sent off site for disposal and/or reclamation;
 - d. the solvent usage rate for the month (i.e., [(6.b) - (6.c)]), in gallons; and,
 - e. the total monthly OC emission rate, in tons per month (i.e., [(6.d) times (solvent density), then divided 2000]).

D. Reporting Requirements

1. The permittee shall submit an annual solvent emission report by February 1 of each year. The report shall cover the previous calendar year. The report shall contain the following:
 - a. the size (solvent/air interface area) and type of the solvent cleaning machine;
 - b. the average monthly trichloroethylene consumption for the solvent cleaning machine in kilograms per month; and,
 - c. the 3-month monthly rolling average trichloroethylene emissions estimates calculated each month using the method as described in the "Testing Requirements" section of this permit.
2. The permittee shall submit an exceedance report on a semiannual basis. If the trichloroethylene 3-month, rolling average of 150 is exceeded, 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 the three-month rolling average for trichloroethylene 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.
3. The permittee shall submit deviation (excursion) reports which include an identification of each month during which the VOC emissions exceeded 0.1 ton/month, and the actual monthly VOC emissions for each such month.
 4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.2.

E. Testing Requirements

1. The permittee shall on the first operating day of every month:
 - a. ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soil. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill line each month, immediately prior to calculating monthly emissions as specified in paragraph (1) (b) below. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations;
 - b. comply with the following requirements:
 - i. sing the records of all solvent additions and removals for the three previous monthly reporting periods required in the "Monitoring and/or Record keeping Requirements" section of this permit, determine solvent emissions (E_i) using the equation below for cleaning machines with a solvent/air interface:

$$E_i = (S_{Ai} - L_{SRi} - S_{SRi}) / A_{REAi}$$

Where:

E_i = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per square meter of solvent/air interface are per month).

S_{Ai} = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month).

L_{SRi} = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent monthly reporting period i (kilograms of solvent per month).

S_{SRi} = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine in solid waste, obtained as described below in paragraph (b) of this section, during the most recent monthly reporting period i (kilograms of solvent per month).

A_{REAi} = the solvent/air interface area of the solvent cleaning machine (square meters);

- ii. determine S_{SRi} from tests conducted using reference method 25d or from engineering calculations included in the compliance report;
- iii. determine the monthly, rolling average EA for the 3-month period ending with the most recent reporting period using the equation below for cleaning machines with a solvent/air interface

$$E_{ai} = (\text{summation of } E_i) / 3, \text{ where the summation is from } j=1 \text{ to } j= 3$$

Where:

E_{ai} = the average halogenated HAP solvent emissions over the preceding 3 monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area per month).

E_i = halogenated HAP solvent emissions for each month (j) for the most recent 3

monthly reporting periods (kilograms of solvent per square meter of solvent/air interface area per month).

j=1 = the most recent monthly reporting period.

j=2 = the monthly reporting period immediately prior to j=1.

j=3 = the monthly reporting period immediately prior to j=2.

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.

Emissions Unit ID: L002

- 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 emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation

0.1 ton/month OC and 1.2 tons/year OC

Applicable Compliance Method

Compliance with the allowable mass emission rates shall be determine through monthly record keeping of the solvent usage.

Emission Limitation

3-month, rolling average limit of 150 kilograms/square meter/month

Applicable Compliance Method

Compliance with the emission limitation shall be determined based upon the procedures described in section A.V.1 of these terms and conditions.

F. Miscellaneous Requirements

None