



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/31/00

CERTIFIED MAIL

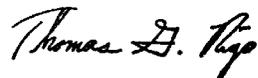
RE: Proposed Title V Chapter 3745-77 permit
16-77-01-0540
Thermo-Rite MFG. Co.

Attn: Genevieve Damico AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Thermo-Rite MFG. Co., has been created in Ohio EPA's State Air Resources System (STARS) on 03/31/00, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's electronic notification of this proposed action. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 before the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,



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

cc: Akron Air Pollution Control
Becky Castle, DAPC PMU



Ohio EPA

State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Date: 03/31/00

Effective Date:

Expiration Date:

The duration of this permit will be five years.

This document constitutes issuance to:

Thermo-Rite MFG. Co.
1355 Evans Ave.
Akron, OH 44305

of a Title V permit for Facility ID: 16-77-01-0540

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:

K001 (Recip. Paint Line)
Ransburg Reciprocating Paint Line

K002 (Paint Booth)
Paint Booth

L001 (Paint Line Degreaser)
Baron-Blakeslee Paint Line Degreaser

L002 (Batch Degreaser)
Detrex Batch Vapor Degreaser

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Akron Air Pollution Control
146 South High Street, Room 904
Akron, OH 44308
(330) 375-2480

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written 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.) See B.6 below if no deviations occurred during the quarter.
 - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. (“Act”); and, pursuant to 40 CFR 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 CFR Part 68 by the date specified in 40 CFR 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 CFR 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 CFR Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. 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.

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be

submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate Ohio EPA District Office or local air agency and to the Administrator of U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

16. Off Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

18. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the “installation” or “modification” of any “air contaminant source,” as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

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 of state-only enforceable 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 state-only required 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. 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).

4. 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.

5. 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.

6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

Z001 - buffing operation
Z002 - sawing operation

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Recip. Paint Line (K001)
Activity Description: Ransburg Reciprocating Paint Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ransburg reciprocating paint line - coating of miscellaneous metal parts	OAC rule 3745-31-05 (PTI 16-123)	See A.I.2.a below.
	OAC rule 3745-17-07	See A.I.2.b below.
	OAC rule 3745-17-11	0.551 lb/hr of particulates
	OAC rule 3745-21-09(U)	See A.I.2.c below. See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a The best available technology determination for PTI 16-123 was determined to be compliance with the applicable State and federal rules.
- 2.b The visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.c Although the requirements of OAC rule 3745-21-09(U) allow for an exemption from applicable VOC content limitations, the daily usage exemption allowed in accordance with OAC rule 3745-21-09(U)(2)(e)(ii) is not part of the federally approved SIP (for the Cleveland/Akron ozone area). The rule has been revised by the Ohio EPA to specify an exemption level (3 gallons per day) that will be acceptable to USEPA. The Ohio EPA has received confirmation from the USEPA of the acceptability of the lower exemption level; therefore, the 3 gallons per day usage restriction in section A.II.1 below will serve as the exemption level while SIP approval by USEPA is being obtained.
- 2.d Pursuant to OAC rule 3745-21-04(C)(28)(e), the permittee shall achieve compliance with the 3 gallons per day usage exemption in OAC rule 3745-21-09(U) as expeditiously as practical, but in no event later than June 15, 2000.

II. Operational Restrictions

1. The permittee shall employ no more than 3 gallons of coating in any one day in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the coating line:
 - a. the name and identification number of each coating employed;
 - b. the volume, in gallons, of each coating employed; and
 - c. the total volume, in gallons, of all of the coatings employed.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit as specified in section A.II.1 above. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 and the operational restriction in section A.II.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

0.551 lb/hr of particulates

Applicable Compliance Method:

To determine the actual worst case particulate emissions rate, the following equation shall be used:

$E = \text{maximum coating solids usage rate in pounds per hour} \times (1-TE) \times (1-CE)$

$E = \text{particulate emissions rate (lbs/hr)}$

$TE = \text{transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used}$

$CE = \text{fractional control efficiency of the control equipment}$

1.c Operational Restriction:

use of no more than 3 gallons of coatings per day

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Paint Booth (K002)
Activity Description: Paint Booth

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
spray paint booth - coating of miscellaneous metal parts	OAC rule 3745-31-05 (PTI 16-1956)	19.3 lbs/day of volatile organic compounds (VOC) for coatings 3.9 tpy of VOC for coatings and cleanup materials 2.4 tpy of particulates
	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	0.551 lb/hr of particulates
	OAC rule 3745-21-09(U)	See A.I.2.b and A.II.1 below.

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- 2.b Although the requirements of OAC rule 3745-21-09(U) allow for an exemption from applicable VOC content limitations, the daily usage exemption allowed in accordance with OAC rule 3745-21-09(U)(2)(e)(ii) is not part of the federally approved SIP (for the Cleveland/Akron ozone area). The rule has been revised by the Ohio EPA to specify an exemption level (3 gallons per day) that will be acceptable to USEPA. The Ohio EPA has received confirmation from the USEPA of the acceptability of the lower exemption level; therefore, the 3 gallons per day usage restriction in section A.II.1 below will serve as the exemption level while SIP approval by USEPA is being obtained.

II. Operational Restrictions

1. The permittee shall employ no more than 3.0 gallons of coating in any one day in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the coating line:
 - a. the name and identification number of each coating employed;
 - b. the volume, in gallons, of each coating employed; and
 - c. the total volume, in gallons, of all of the coatings employed.
2. The permittee shall collect and record the following information each day for the coating line:
 - a. the name and identification number of each coating employed;
 - b. the volume, in gallons, of each coating employed;
 - c. the VOC content of each coating, in pounds per gallon, as applied; and
 - d. the total VOC emissions from all coatings employed, in pounds.
3. The permittee shall collect and record the following information each month for the purpose of determining annual VOC emissions for the coating line:
 - a. the name and identification of each cleanup material employed;
 - b. the number of gallons of each cleanup material employed;
 - c. the VOC content of each cleanup material, in pounds per gallon; and
 - d. the total VOC emissions from all cleanup materials employed, in tons.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit as specified in section A.II.1 above. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
2. The permittee shall submit deviation (excursion) reports which include an identification of each day during which the VOC emissions exceeded 19.3 pounds per day, and the actual daily VOC emissions for each such day.
3. The permittee shall also submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year, in tons. These reports shall be submitted by January 31 of each year.
4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 and the operational restriction in section A.II.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

V. Testing Requirements (continued)

1.b Emission Limitation:

0.551 lb/hr of particulates

Applicable Compliance Method:

To determine the actual worst case particulate emissions rate, the following equation shall be used:

$$E = \text{maximum coating solids usage rate in pounds per hour} \times (1-TE) \times (1-CE)$$

E = particulate emissions rate (pounds per hour)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = fractional control efficiency of the control equipment

1.c Emission Limitation:

2.4 tpy of particulates

Applicable Compliance Method:

To determine the actual worst case particulate emissions rate, the following equation shall be used:

$$E = [\text{maximum coating solids usage rate in pounds per hour} \times (1-TE) \times (1-CE) \times 8760] / 2000$$

E = particulate emissions rate (tons per year)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = fractional control efficiency of the control equipment

1.d Operational Restriction:

use of no more than 3.0 gallons of coatings per day

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.1 above.

1.e Emission Limitation:

19.3 lbs/day of VOC for coatings

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.2. USEPA Method 24 or 24A shall be used to determine the VOC content for each coating.

Facility Name: **Thermo-Rite Mfg. Co.**

Facility ID: **16-77-01-0540**

Emissions Unit: **Paint Booth (K002)**

V. Testing Requirements (continued)

1.f Emission Limitation:

3.9 tpy of VOC for coatings and cleanup materials

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in sections A.III.2 and A.III.3. Formulation data shall be used to determine the VOC content of each cleanup material. US EPA Method 24 or 24A shall be used to determine the VOC content for each coating.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
spray paint booth - coating of miscellaneous metal parts	none	See B.III.1 below.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for this emissions unit (K002) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: toluene

TLV (mg/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 19.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3275

MAGLC (ug/m3): 4476.19

Pollutant: VM&P naphtha

TLV (mg/m3): 1370

Maximum Hourly Emission Rate (lbs/hr): 19.3

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3275

MAGLC (ug/m3): 32619.05

III. Monitoring and/or Record Keeping Requirements (continued)

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Paint Line Degreaser (L001)
Activity Description: Baron-Blakeslee Paint Line Degreaser

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paint line conveyORIZED vapor degreaser	OAC rule 3745-31-05 (PTI 16-123)	See A.I.2.a below.
	OAC rule 3745-21-09(O)	See A.I.2.b below.
	40 CFR Part 63, Subpart T	See A.I.2.c below.

2. Additional Terms and Conditions

- 2.a The best available technology determination for PTI 16-123 was determined to be compliance with the applicable State and federal rules.
- 2.b 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.c The permittee shall ensure that the trichloroethylene monthly emissions from the solvent cleaning machine do not exceed a 3-month, rolling average limit of 153 kilograms/square meter/month.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain a log of solvent additions and removals for the solvent cleaning machine.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall demonstrate compliance with the 3-month rolling average monthly emissions of less than or equal to 153 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.
 - 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.
 - 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.

IV. 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.
 - 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.

IV. Reporting Requirements (continued)

2. The permittee shall submit an exceedance report on a semiannual basis. If the trichloroethylene 3-month, rolling average of 153 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.
 - b. If no exceedance has occurred, a statement to that effect shall be submitted.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. 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. Using 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:

$$E_i = (SA_i - LSR_i - SSR_i) / AREA_i$$

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).

SA_i = 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).

LSR_i = 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).

SSR_i = 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).

V. Testing Requirements (continued)

AREAi = the solvent/air interface area of the solvent cleaning machine (square meters).

ii. Determine SSRi 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.

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

Where:

EA_i = 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 $j=2$.

V. Testing Requirements (continued)

2. The permittee shall determine the facility's potential to emit (PTE) from all solvent cleaning operations. A facility's total PTE is the sum of the HAP emissions from all solvent cleaning operations plus all HAP emissions from other emissions units from within the facility. The potential to emit shall be determined in accordance with the following procedures:

- a. Determine the potential to emit for each individual solvent cleaning machine using the following equation:

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

Where:

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

H_i = hours of operation for solvent cleaning machine i (hours per year)
= 8760 hours per year, unless otherwise restricted by a federally enforceable requirement.

W_i = the working mode uncontrolled emission rate (kilograms per square meter per hour) = 1.95 kilograms per square meter per hour for batch vapor and cold cleaning machines = 1.12 kilograms per square meter per hour for in-line cleaning machines.

SAI_i = solvent/air interface area of solvent cleaning machine i (square meters). Section 63.461 defines the solvent/air interface area for those machines that have a solvent /air interface. Cleaning machines that do not have a solvent area interface shall calculate a solvent/air interface area using the procedure in paragraph (b) below.

- b. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the following equation:

$$SAI = 2.2 * (Vol)^{0.6}$$

Where:

SAI = the solvent/air interface area (square meters).

Vol = the cleaning capacity of the solvent cleaning machine (cubic meters).

- c. Sum the PTE_i 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 in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

- 3.a Emission Limitation:

3-month, rolling average limit of 153 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.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Batch Degreaser (L002)
Activity Description: Detrex Batch Vapor Degreaser

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Detrex open-top vapor degreaser	OAC rule 3745-31-05 (PTI 16-1877)	0.1 ton/month of organic compounds (OC)
		1.2 tpy of OC
	OAC rule 3745-21-09(O)	See A.I.2.b below.
	40 CFR Part 63, Subpart T	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a** 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.
- 2.b** 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.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain a log of solvent additions and removals for the solvent cleaning machine.

III. Monitoring and/or Record Keeping Requirements (continued)

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.
 - 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 each 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., [(b) - (c)]), in gallons; and
 - e. the total monthly OC emission rate, in tons per month (i.e., [(d) times the solvent density, then divided by 2000 lbs/ton].

IV. 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.

IV. Reporting Requirements (continued)

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.1.c.

V. 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. Using 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:

$$E_i = (S_{ai} - LSR_i - SSR_i) / AREA_i$$

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).

LSR_i = 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).

SSR_i = 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).

V. Testing Requirements (continued)

AREAi = the solvent/air interface area of the solvent cleaning machine (square meters).

ii. Determine SSRi 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.

$E_{ai} = (\text{summation of } E_i) / 3$, where the summation is from $j=1$ 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 $j=2$.

V. Testing Requirements (continued)

2. The permittee shall determine the facility's potential to emit (PTE) from all solvent cleaning operations. A facility's total PTE is the sum of the HAP emissions from all solvent cleaning operations plus all HAP emissions from other emissions units from within the facility. The potential to emit shall be determined in accordance with the following procedures:

a. Determine the potential to emit for each individual solvent cleaning machine using the following equation:

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

Where:

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

H_i = hours of operation for solvent cleaning machine i (hours per year).
= 8760 hours per year, unless otherwise restricted by a federally enforceable requirement.

W_i = the working mode uncontrolled emission rate (kilograms per square meter per hour).

= 1.95 kilograms per square meter per hour for batch vapor and cold cleaning machines.

= 1.12 kilograms per square meter per hour for in-line cleaning machines.

SAI_i = solvent/air interface area of solvent cleaning machine i (square meters). Section 63.461 defines the solvent/air interface area for those machines that have a solvent /air interface. Cleaning machines that do not have a solvent area interface shall calculate a solvent/air interface area using the procedure in paragraph (b) below.

b. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the following equation:

$$SAI = 2.2 * (Vol)^{0.6}$$

Where:

SAI = the solvent/air interface area (square meters).

Vol = the cleaning capacity of the solvent cleaning machine (cubic meters).

c. Sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

3. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

3.a 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.

V. Testing Requirements (continued)

3.b Emission Limitation:

0.1 ton/month of OC
1.2 tpy of OC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section A.III.4.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(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 employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **Thermo-Rite Mfg. Co.**
Facility ID: **16-77-01-0540**

THIS IS THE LAST PAGE OF THE PERMIT
