



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

05/29/02

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

01-49-00-0088
SHOWA Aluminum Corporation of America
Robert Feltz
10500 O'Day-Harrison Rd
P.O. Box 10
Mt. Sterling, OH 43143-9474

Dear Robert Feltz:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

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

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

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

If you have any questions, please contact Central District Office.

Very truly yours,

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

cc: Central District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: **05/29/02**

Effective Date: **05/29/02**

Expiration Date: **05/29/07**

This document constitutes issuance of a Title V permit for Facility ID: 01-49-00-0088 to:
SHOWA Aluminum Corporation of America
10500 O'Day-Harrison Rd
P.O. Box 10
Mt. Sterling, OH 43143-0010

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

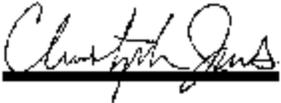
K002 (Powder Paint Booth and Oven) Powder Coating Line: Gas fired oven	P017 (Evaporator Fin Machine #1) Fin machine	Form condenser fins and remove forming oil by heating
K003 (Touch-up Spray Paint) After painting and inspection, spray cans are used to touch-up any paint defects on the parts.	P018 (Condenser Core Builder #1) Form condenser fins and remove forming oil by heating	P035 (ED Cut off process) Cutting of extruded aluminum tubes for the final product
L007 (Conveyorized Aluminum Tube Degreaser) Final ED Tube degreaser for both 24 m and 30 mm lines	P019 (Condenser Core Builder #2) Form condenser fins and remove forming oil by heating	P037 (Zinc Deposition Process) Zinc deposition process
L008 (Conveyorized Degreaser) Methylene chloride degreaser	P020 (Condenser Core Builder #3) Form condenser fins and remove forming oil by heating	P038 (Condenser Banding and Bracketing #1) Banding and bracketing of condensers using isopropanol
L014 (Automatic Tube Cleaner (30mm ED line)) Solvent Cleaning Process	P023 (Roller Leveler: 24 mm line) Rolls and levels copier tubes. Equipped with catalytic incinerator.	P039 (Condenser Banding and Bracketing #2) Banding and bracketing of condensers using isopropanol
L015 (Automatic Tube Cleaner (24 mm ED line)) Solvent Cleaning Process	P028 (Evaporator Fin Machine #2) Fin machine	P040 (Condenser Banding and Bracketing #3) Banding and bracketing of condensers using isopropanol
N001 (Paint burn off oven) Pyrolysis type incinerator	P029 (Evaporator Fin Machine #3) Fin machine	P041 (Condenser Banding and Bracketing #4) Banding and bracketing of condensers using isopropanol
P002 (Evaporator GMA) Chemical conversion coating with scrubbers	P033 (Condenser GMA) Chemical conversion coating with scrubbers	
P013 (Roller Leveler: 30 mm line) Rolls and levels copier tubes; uses low odor base solvent.	P034 (Condenser Core Builder #4)	

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 3745-77-08(E) 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:

Central District Office
3232 Alum Creek Drive
PO Box 1049
Columbus, OH 43216-1049
(614) 728-3778

OHIO ENVIRONMENTAL PROTECTION AGENCY

A handwritten signature in black ink, appearing to read "Christopher Jones", is written over a solid black horizontal line.

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

1. **Monitoring and Related Record Keeping 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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))
- 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.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))
- 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 record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))
 - 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 record keeping 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 (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements of 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.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, 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, record keeping, 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.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

- 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.

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

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 condition, of any emissions unit(s) 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 upset conditions.

Except as provided in OAC rule 3745-15-06, 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).

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))

3. Risk Management Plans

If the permittee is required to 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"), the permittee shall comply with the requirement to register such a plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

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.

(Authority for term: OAC rule 3745-77-07(A)(5))

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.

(Authority for term: OAC rule 3745-77-07(A)(6))

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, in accordance with A.10 below. 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.

(Authority for term: OAC rule 3745-77-07(A)(7))

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.

(Authority for term: OAC rule 3745-77-07(A)(8))

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.

(Authority for term: OAC rule 3745-77-07(A)(9))

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.

(Authority for term: OAC rule 3745-77-07(A)(10))

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 (18) 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.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

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.

(Authority for term: OAC rule 3745-77-07(B))

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 Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the 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.
(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

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.
(Authority for term: OAC rule 3745-77-07(F))

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).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

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.
(Authority for term: OAC rule 3745-77-07(G))

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 of the U.S. EPA, 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 purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

(Authority for term: OAC rule 3745-77-07(I))

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.

(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

19. 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.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. 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.

(Authority for term: OAC rule 3745-77-07(A)(1))

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping 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 record keeping 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.)

2. 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.

3. 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.

4. 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).

5. 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.

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:

- B001 - boiler no. 1 (5.25 mmBtu/hr);
- B002 - heater no. 1 (6.5 mmBtu/hr);
- B003 - heater no. 2 (6.5 mmBtu/hr);
- B005 - heater no. 3 (5.4 mmBtu/hr);
- B006 - heater no. 4 (5.4 mmBtu/hr);
- B007 - boiler no. 2 (5.25 mmBtu/hr);
- B008 - boiler no. 3;
- B009 - Reznor heater;
- B010 - Rapid Engineering heater;
- F001 - unpaved driveway;
- L016 - cold cleaner 1;
- L017 - cold cleaner 2;
- L018 - cold cleaner 3;
- P004 - helium leak check for evaporators;
- P005 - aluminum brazing and welding evaporator;
- P007 - KYK Furnace
- P008 - helium leak check for condensers;
- P009 - aluminum brazing and welding condenser;
- P012 - maintenance welding;
- P016 - vacuum brazing with cooling;
- P024 - Rogers Brazing Furnace no. 1
- P030 - Rogers Brazing Furnace no. 3
- P036 - extrusion cut-off process;
- P042 - chem lab;
- P043 - quality lab;
- P044 - quality test lab;
- P045 - ink jet printers for condenser;
- P046 - ink jet printers for evaporator;
- P047 - extrusion;
- P048 - induction brazing 1;
- P049 - induction brazing 2;
- P050 - aqueous degreaser 1;
- P051 - aqueous degreaser 2;
- P052 - condenser core builder no. 0;
- P053 - wheelabrator;
- P054 - sandblast 1;
- P055 - sandblast 2;
- P057 - evaporator finish lines;
- P058 - evaporator press 1;
- P059 - evaporator press 2;
- P060 - evaporator press 3;
- P061 - evaporator press 4;
- P066 - condenser side plate press;
- P067 - condenser pipe assembly press;
- P068 - condenser header press;
- P069 - maintenance painting and 5S activities;
- P070 - maintenance machine shop;
- P071 - extrusion press;
- P078 - caustic die cleaning;
- P079 - extrusion die maintenance;
- P080 - tube drawing for 24 mm line;
- P081 - tube drawing for 30 mm line;
- P082 - wastewater treatment plant;
- P083 - extrusion oiler;
- P084 - header pipe flow machines;

- B. State Only Enforceable Section**
- P084 - header pre-flux machine;
 - P085 - bracket pre-flux machine;
 - P086 - cap and baffle pre-flux machine;
 - P087 - core preheater;
 - P088 - condenser core builder #5;

- P089 - induction Braze 3;
- P090 - die maintenance sand blow off; and
- P091 - ULVAC smoke eater.

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

B. State Only Enforceable Section (continued)

The following insignificant emissions units are located at this facility:

- B001 - boiler no. 1 (5.25 mmBtu/hr);
- B002 - heater no. 1 (6.5 mmBtu/hr);
- B003 - heater no. 2 (6.5 mmBtu/hr);
- B005 - heater no. 3 (5.4 mmBtu/hr);
- B006 - heater no. 4 (5.4 mmBtu/hr);
- B007 - boiler no. 2 (5.25 mmBtu/hr);
- B008 - boiler no. 3;
- B009 - Reznor heater;
- B010 - Rapid Engineering heater;
- F001 - unpaved driveway;
- L016 - cold cleaner 1;
- L017 - cold cleaner 2;
- L018 - cold cleaner 3;
- P004 - helium leak check for evaporators;
- P005 - aluminum brazing and welding evaporator;
- P007 - KYK Furnace
- P008 - helium leak check for condensers;
- P009 - aluminum brazing and welding condenser;
- P012 - maintenance welding;
- P016 - vacuum brazing with cooling;
- P024 - Rogers Brazing Furnace no. 1
- P030 - Rogers Brazing Furnace no. 3
- P036 - extrusion cut-off process;
- P042 - chem lab;
- P043 - quality lab;
- P044 - quality test lab;
- P045 - ink jet printers for condenser;
- P046 - ink jet printers for evaporator;
- P047 - extrusion;
- P048 - induction brazing 1;
- P049 - induction brazing 2;
- P050 - aqueous degreaser 1;
- P051 - aqueous degreaser 2;
- P052 - condenser core builder no. 0;
- P053 - wheelabrator;
- P054 - sandblast 1;
- P055 - sandblast 2;
- P057 - evaporator finish lines;
- P058 - evaporator press 1;
- P059 - evaporator press 2;
- P060 - evaporator press 3;
- P061 - evaporator press 4;
- P066 - condenser side plate press;
- P067 - condenser pipe assembly press;
- P068 - condenser header press;
- P069 - maintenance painting and 5S activities;
- P070 - maintenance machine shop;
- P071 - extrusion press;
- P078 - caustic die cleaning;
- P079 - extrusion die maintenance;
- P080 - tube drawing for 24 mm line;
- P081 - tube drawing for 30 mm line;
- P082 - wastewater treatment plant;
- P083 - extrusion oiler;
- P084 - header pipe flow machine;

B. State Only Enforceable Section (continued)

- P084 - header pre-flux machine;
- P085 - bracket pre-flux machine;
- P086 - cap and baffle pre-flux machine;
- P087 - core preheater;
- P088 - condenser core builder #5;

- P089 - induction Braze 3;
- P090 - die maintenance sand blow off; and
- P091 - ULVAC smoke eater.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emissions 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: Powder Paint Booth and Oven (K002)

Activity Description: Powder Coating Line: Gas fired oven

A. State and Federally 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>
powder coating line with gas-fired bake oven, with dry filtration system	OAC rule 3745-31-05(A)(3) (PTI 01-7359)	Volatile organic compound (VOC) emissions shall not exceed 0.97 pound per hour and 2.8 tons per year.
		Particulate emissions (PE) shall not exceed 0.14 pound of PE per hour and 0.4 ton per year.
		The VOC content of each coating employed shall not exceed 0.31 pound of VOC per gallon of powder coating, excluding water and exempt solvents.
		See sections A.II.1 and A.II.2 below.
		Nitrogen oxides (NOx) emissions from the combustion of natural gas in the bake oven shall not exceed 0.36 pound of NOx per hour and 1.58 tons per year. See section A.I.2.a below.
	OAC rule 3745-21-09(U)(1)(i)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
		The VOC emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

- 2.a The pound per hour and tons per year NOx emission limitations from the combustion of natural gas in the bake oven reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

II. Operational Restrictions (continued)

- 1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.
- 2. The maximum annual coating usage for this emissions unit shall not exceed 17,920 gallons or 112 tons of powder coating.

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information each month for this emissions unit:
 - a. the name and identification number of each coating, as applied;
 - b. the total pounds of each powder coating employed, excluding water and exempt solvents;
 - c. the VOC content of each powder coating, in pounds of VOC per gallon of coating, excluding water and exempt solvents;
 - d. the total VOC emissions from this emissions unit, i.e., the sum of [(b) x (c)] for all powder coatings employed;
 - e. the total hours of operation; and
 - f. the average hourly emission rate, i.e. [(d) / (e)].
- 2. The permittee shall record the total annual coating usage (in gallons or tons, including water and exempt solvents) for this emissions unit.
- 3. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

IV. Reporting Requirements

- 1. The permittee shall notify the Ohio EPA, Central District Office in writing of any monthly record showing the use of coatings that do not comply with the VOC content limitation. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
- 2. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.

IV. Reporting Requirements (continued)

3. The permittee shall submit quarterly (excursion) deviation reports that identify all exceedances of the hourly VOC emission limitation (0.97 lb/hour) for this emissions unit.

All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

4. The permittee shall submit annual reports that specify the annual coating usage (in gallons or tons, including water and exempt solvents) for this emissions unit during the previous calendar year. The reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

0.97 pound of VOC per hour

Applicable Compliance Method:

Compliance with the VOC pound per hour emission limitation shall be determined by the record keeping performed pursuant to section A.III.1 of this permit.

If required, the permittee shall demonstrate compliance with this emission limitation through emissions tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

1.b Emission Limitation:

2.8 tons of VOC per year

Applicable Compliance Method:

Compliance shall be based upon the summation of the monthly VOC emissions per the record keeping requirements specified in section A.III.1 of this permit.

1.c Emission Limitation:

0.14 pound of PE per hour

Applicable Compliance Method:

The PE emission limitation was established by the following calculations:

Maximum of 38.6 pounds of powder coating used per hour.

The transfer efficiency was assumed to be 93 percent.

The control efficiency of the dry filtration system was assumed to be 95 percent.

$(38.6 \text{ lbs powder coating/hour}) \times (1 - 0.93) \times (1 - 0.95) = 0.14 \text{ pound of PE per hour}$

If required, the permittee shall demonstrate compliance with this emission limitation through emissions tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.d Emission Limitation:

0.4 ton of PE per year

Applicable Compliance Method:

Compliance with the particulate emissions limitation shall be determined by using the following equation:

$$\text{ton of PE per year} = (\text{tons powder coating/year}) \times (1 - 0.93) \times (1 - 0.95)$$

where:

The transfer efficiency is assumed to be 93 percent.

The control efficiency of the dry filtration system is assumed to be 95 percent.

1.e Emission Limitation:

0.31 pound of VOC per pound of powder coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance with the VOC content limitation for coatings shall be based on the record keeping performed pursuant to section A.III.1. In accordance with OAC rule 3745-21-04(B)(5), U.S. EPA Method 24 shall be used to determine the VOC contents for the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the owner or operator shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24. Note: The Method 24 data may be supplied by the coating manufacturer.

1.f Emission Limitation:

Visible particulate emissions shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.g Material Usage Limitation:

17,920 gallons or 112 tons of powder coating per year

Applicable Compliance Method:

Compliance with the annual powder coating usage limitation shall be determined by the record keeping specified in section A.III.2.

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>
powder coating line with gas fired bake oven, with dry filtration system		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for emissions unit K002, PTI 01-7359, issued on 03/25/98, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: Caprolactam

TLV (mg/m3): 1 (dust), 23 (vapor)

Maximum Hourly Emission Rate (lbs/hr): 0.039 (dust), 0.77 (vapor)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.3 (dust), 45.6 (vapor)

MAGLC (ug/m3): 23.8 (dust), 547 (vapor)

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

2. 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, 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.

3. 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: Touch-up Spray Paint (K003)

Activity Description: After painting and inspection, spray cans are used to touch-up any paint defects on the parts.

A. State and Federally 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>
condenser spray paint touch-up line and related conveyor belt cleanup	OAC rule 3745-31-05(A)(3) (PTI 01-08382)	Volatile organic compound (VOC) emissions shall not exceed 7.8 pounds per hour and 5.80 tons per year, including cleanup materials. Particulate emissions (PE) shall not exceed 0.16 pound per hour and 0.70 ton per year. See sections A.I.2.a, A.II.1, and A.II.2 below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-21-09(U)(2)(e)	The coating usage exemption level specified by this rule is less stringent than the coating usage restriction established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11(B)(1)	The PE limitation established by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed 20% opacity as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

- The 0.16 pound of PE per hour limitation for this emissions unit was established to reflect the hourly potential to emit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

II. Operational Restrictions

1. The coating usage in this emissions unit shall not exceed 3.5 gallons per day.
2. The VOC content of each coating employed in this emissions unit shall not exceed 4.54 pounds of VOC per gallon, and the VOC content of each cleanup material employed in this emissions unit shall not exceed 6.59 pounds of VOC per gallon.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each coating and cleanup material employed;
 - b. the total gallons of each cleanup material employed;
 - c. the VOC content of each cleanup material, in pounds per gallon;
 - d. the total gallons of each coating employed;
 - e. the total gallons of all coatings employed;
 - f. the VOC content of each coating, in pounds of VOC per gallon of coating;
 - g. the total VOC emissions from all coatings and cleanup materials employed, in pounds [the sum of (d) x (f) for all coatings, plus (b) x (c) for all cleanup materials];
 - h. the total hours of operation; and
 - i. the average hourly emission rate, i.e., [(g) / (h)].

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing the use of noncomplying coatings or cleanup materials (i.e., for VOC content). The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
2. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that this emissions unit employed more than the maximum daily coating usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that summarize the total VOC emissions, in tons, from this emissions unit. Each report shall be submitted by January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:

7.8 pounds of VOC per hour, including cleanup material

Applicable Compliance Method:

Compliance with the VOC pound per hour emission limitation shall be determined by the record keeping performed pursuant to section A.III.1 of this permit.

If required, the permittee shall demonstrate compliance with this emission limitation through emissions tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

1.b Emission Limitation:

5.80 tons of VOC per year, including cleanup materials

Applicable Compliance Method:

Compliance shall be based upon the summation of the daily VOC emissions per the record keeping requirements specified in section A.III.1 of this permit.

1.c Emission Limitation:

0.16 pound of PE per hour

Applicable Compliance Method:

The hourly PE limitation was established by using the following calculations:

$(0.86 \text{ pound of coating/hour}) \times (0.186 \text{ pound of solids (PE)/pound coating}) = 0.16 \text{ pound of PE/hour}$

If required, the permittee shall demonstrate compliance with this emission limitation through emissions tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(10).

1.d Emission Limitation:

0.70 ton PE per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.e Emission Limitation:

Visible particulate emissions shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.f Material Usage Restriction:

3.5 gallons of coating per day

Applicable Compliance Method:

Compliance shall be determined by the record keeping performed pursuant to Section A.III.1.

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>
condenser spray paint touch-up line and related conveyor belt cleanup		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for emissions unit K003, PTI 01-08382, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: Acetone

TLV (mg/m3): 1,188

Maximum Hourly Emission Rate (lbs/hr): 7.8

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,652

MAGLC (ug/m3): 28,285.7

Pollutant: Toluene

TLV (mg/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 2.65

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,230

MAGLC (ug/m3): 4,476.2

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

2. 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, 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.

3. 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: Conveyorized Aluminum Tube Degreaser (L007)
Activity Description: Final ED Tube degreaser for both 24 m and 30 mm lines

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>
in-line conveyorized vapor degreaser for 24 mm and 30 mm aluminum tube ED lines, with refrigeration device	OAC rule 3745-31-05(A)(3) (PTI 01-7358)	<p>Volatile organic compound (VOC) emissions shall not exceed 9.04 pounds per hour and 35.04 tons per year.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(O)(6)(b) and 40 CFR, Part 63, Subpart T.</p> <p>See sections A.I.2.i and A.II.12 below.</p>
	OAC rule 3745-21-09(O)(6)(b)	This emissions unit is exempt from the requirements of OAC rule 3745-21-09(O)(2) thru (O)(5). See section A.I.2.h. below.
	40 CFR, Part 63, Subpart T	See sections A.I.2.a thru A.I.2.g, and sections II, III, IV and V below.

2. Additional Terms and Conditions

- 2.a The solvent cleaning machine shall employ a freeboard refrigeration device whenever this emissions unit is in operation.
- 2.b The permittee shall ensure that the idling and downtime mode cover is in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover to not be in place. The cover must be able to be readily opened or closed, must completely cover the cleaning machine openings when in place, and must be free of cracks, holes and other defects.
- 2.c The solvent cleaning machine shall have a freeboard ratio of 1.0 or greater.

2. Additional Terms and Conditions (continued)

- 2.d** The solvent cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
- 2.e** The solvent cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.
- 2.f** The solvent cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- 2.g** The solvent cleaning machine shall have a primary condenser.
- 2.h** The rule citation reflects the new exemption added to OAC rule 3745-21-09(O) for solvent metal cleaning operations subject to federal MACT standards under 40 CFR, Subpart T, provided the requirements of Subpart T are specified in the terms and conditions. The revised rule containing the exemption was adopted by the Director of Ohio EPA in May 1999. The USEPA has agreed to consider the rule citation as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the rule citation as a revision to the Ohio SIP for ozone.
- 2.i** The pounds per hour VOC emission limitation reflects the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

II. Operational Restrictions

- 1.** Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
- 2.** Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes must be tipped or rotated before being removed from the solvent cleaning machine unless an equally effective approach has been approved by the Ohio EPA, Central District Office.
- 3.** Parts baskets or parts shall not be removed from the solvent cleaning machine until dripping has stopped.
- 4.** During startup of the solvent cleaning machine, the primary condensers shall be turned on before the sump heater.
- 5.** During shutdown of the solvent cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
- 6.** When solvent is added or drained from the solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
- 7.** The solvent cleaning machine and its associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the satisfaction of the Ohio EPA, Central District Office to achieve the same or better results as those recommended by the manufacturer.
- 8.** The permittee shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in 40 CFR, Part 63, Appendix A if requested during an inspection by the Ohio EPA, Central District Office.
- 9.** Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but must not allow liquid solvent to drain from the container.
- 10.** Sponges, fabric, wood, and paper products shall not be cleaned.

II. Operational Restrictions (continued)

11. The permittee shall ensure that the freeboard refrigeration device's chilled air temperature (in degrees Fahrenheit), measured at the center of the air blanket, is no greater than 30 percent of the solvent's boiling point.
12. The solvent cleaning machine trichloroethylene (TCE) usage shall not exceed 5,711 net gallons per year.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall conduct monthly visual inspections of the solvent cleaning machine to determine that the idling and downtime mode cover is opening and closing properly, completely covers the cleaning machine when closed, and is free of cracks, holes, and other defects.
2. The permittee shall monitor the hoist speed as described below:
 - a. The permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).
 - b. The permittee shall conduct monthly monitoring of the hoist speed. If after the first year, no exceedances of the hoist speed are measured, the permittee may begin monitoring the hoist speed quarterly.
 - c. If an exceedance of the hoist speed occurs during quarterly monitoring, the permittee shall return to a monthly monitoring frequency until another year of compliance without an exceedance is demonstrated.
 - d. If the permittee can demonstrate to the satisfaction of the Ohio EPA, Central District Office in the initial compliance report that the hoist speed cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.
3. The permittee shall maintain the following records in written or electronic form for the lifetime of the solvent cleaning machine:
 - a. Owner's manuals, or if not available, written maintenance and operating procedures for the solvent cleaning machine and control equipment.
 - b. The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for the installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.
 - c. Records of the halogenated hazardous air pollutant (HAP) solvent content for the solvent used in the solvent cleaning machine.
4. The permittee shall maintain the following records in written or electronic form for a period of five years for the solvent cleaning machine:
 - a. The results of control device monitoring required in this section of the permit.
 - b. Information on the actions taken to comply with 40 CFR 63.463 (e) and (f), including records of written or verbal orders for replacement parts, a description of the repair made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.
5. The permittee shall conduct monitoring and record the results on a weekly basis for the freeboard refrigeration device by using a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.
6. The permittee shall maintain daily records of TCE usage (TCE added to the degreaser), in gallons, and the amount of materials collected for recycle and/or disposal at an outside facility. Materials that are tightly covered and collected for recycle and/or disposal at an outside facility shall be recorded and subtracted from the total gallon usage record.

IV. Reporting Requirements

- 1.** The permittee shall submit an annual report by February 1 of each year for the preceding year. Each annual report shall contain the following:
 - a. A signed statement from the facility owner or their designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required pursuant to 40 CFR 60.463(d)(10)."
 - b. Calculations of the total VOC emissions, in tons.
- 2.a** The permittee shall submit an exceedance report on a semiannual basis. The written reports shall be submitted every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months, and shall contain the following:
 - a. any occasion in which the temperature of the chilled air blanket, measured at the center of the air blanket, was greater than 30% of the solvent's boiling point, and no correction was made within 15 days of detection; and
 - b. any occasion when the cover did not completely cover the cleaning machine openings when in place whenever parts were not in the solvent cleaning machine and/or the cover had cracks, holes or other defects and no correction was made within 15 days of detection.
- 2.b** Once an exceedance has occurred, 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 Ohio EPA, Central District Office. The permittee may receive approval of less frequent reporting if the following conditions are met:
 - a. the emissions unit has demonstrated a full year of compliance without an exceedance;
 - b. the permittee continues to comply with all relevant recordkeeping and monitoring requirements specified in 40 CFR 63.1, General Provisions; and
 - c. the Ohio EPA, Central District Office does not object to a reduced frequency of reporting for the affected emissions unit as provided in paragraph (e) (3) (iii) of Subpart A, 40 CFR 63.1, General Provisions.
- 2.c** Each exceedance report shall contain the following:
 - a. The reason and a description of the exceedance and action(s) taken to comply with 40 CFR 63.463(e) and (f) including written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.
 - b. If no exceedance has occurred, a statement to that effect shall be submitted.
- 3.** The permittee shall submit annual reports that specify the total amount of solvent employed, in gallons, during the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

- 1.** Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:

9.04 pounds of VOC per hour

Applicable Compliance Method:

Compliance with this emissions limitation shall be determined by using the following calculations:

VOC emissions shall be calculated using the difference between the amount of TCE used in the degreaser less the amount of TCE collected for disposal. One hundred percent of the TCE content shall be calculated as VOC emissions, less the collected amount. Until testing provides a more accurate concentration, 53% of the recovered waste solvent shall be considered TCE and credited for recovery. Calculations shall be documented as follows:

VOC emissions/hour = (0.9 gallon/hour x 12.272 pounds/gallon) - (gallon(s) recovered/hour x 12.272 pounds/gallon x 0.53)

Density of TCE = 12.272 pounds/gallon

Maximum of 0.9 gallon of TCE used per hour

53% of the recovered waste solvent shall be considered TCE and credited for recovery

1.b Emission Limitation:

35.04 tons of VOC per year

Applicable Compliance Method:

Compliance with this emissions limitation shall be determined by using the following calculations:

VOC emissions shall be calculated using the difference between the amount of TCE used in the degreaser less the amount of TCE collected for disposal. One hundred percent of the TCE content shall be calculated as VOC emissions, less the collected amount. Until testing provides a more accurate concentration, 53% of the recovered waste solvent shall be considered TCE and credited for recovery. Calculations shall be documented as follows:

Annual VOC emissions = (actual gallons employed/year x 12.272 pounds/gallon) - (gallons recovered/year x 12.272 pounds/gallon x 0.53) x (1 ton/2000 pounds)

Density of TCE = 12.272 pounds/gallon

53% of the recovered waste solvent shall be considered TCE and credited for recovery

V. Testing Requirements (continued)

1.c Material Usage Restriction:

The solvent cleaning machine TCE usage shall not exceed 5,711 net gallons per year.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section A.III.6 of this permit and by using the following calculations:

Materials that are tightly covered and collected for recycle and/or disposal at an outside facility shall be recorded and subtracted from the total gallon usage record. Until more recent test data provides a more accurate concentration, a maximum of 53% TCE shall be used to calculate the recovered credit material. The net TCE gallon usage shall be calculated as follows:

Net TCE usage (gallons) = total TCE purchased or added per year - (recovered TCE x 0.53)

53% of the recovered waste solvent shall be considered TCE and credited for recovery

V. Testing Requirements (continued)

- 1.d** 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:

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).

= 8,760 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 discussed below.

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).

Finally, sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

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>
in-line conveyorized vapor degreaser for 24 mm and 30 mm aluminum tube ED lines, with refrigeration device		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for emissions unit L007, PTI 01-7358, issued on 08/12/98, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: Trichloroethylene

TLV (mg/m3): 269

Maximum Hourly Emission Rate (lbs/hr): 9.04

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2,450

MAGLC (ug/m3): 6,405

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

2. 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, 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.

3. 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: Conveyorized Degreaser (L008)

Activity Description: Methylene chloride 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>
in-line conveyorized vapor degreaser for heat exchangers and parts, with superheated vapor system	OAC rule 3745-31-05(A)(3) (PTI 01-6600)	Organic compound (OC) emissions shall not exceed 9.8 pounds per hour and 43 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(O)(6)(b) and 40 CFR, Part 63, Subpart T.
	OAC rule 3745-21-09(O)(6)(b)	See section A.II.16 below. This emissions unit is exempt from the requirements of OAC rule 3745-21-09(O)(2) thru (O)(5). See section A.I.2.h. below.
	40 CFR, Part 63, Subpart T	See sections A.I.2.a thru A.I.2.g, and sections II, III, IV and V below.

2. Additional Terms and Conditions

- 2.a** The solvent cleaning machine shall employ a superheated vapor system whenever this emissions unit is in operation.
- 2.b** The solvent cleaning machine shall employ a reduced room draft whenever this emissions unit is in operation. The method of achieving the reduced room draft shall include a complete enclosure around the cleaning machine with no openings above the degreaser, in order to provide a totally draft free enclosure.
- 2.c** The solvent cleaning machine shall have a freeboard ratio of 1.0 or greater.
- 2.d** The solvent cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
- 2.e** The solvent cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.

2. Additional Terms and Conditions (continued)

- 2.f** The solvent cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- 2.g** The solvent cleaning machine shall have a primary condenser.
- 2.h** The rule citation reflects the new exemption added to OAC rule 3745-21-09(O) for solvent metal cleaning operations subject to federal MACT standards under 40 CFR, Subpart T, provided the requirements of Subpart T are specified in the terms and conditions. The revised rule containing the exemption was adopted by the Director of Ohio EPA in May 1999. The USEPA has agreed to consider the rule citation as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the rule citation as a revision to the Ohio SIP for ozone.

II. Operational Restrictions

- 1.** Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
- 2.** Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes must be tipped or rotated before being removed from the solvent cleaning machine unless an equally effective approach has been approved by the Ohio EPA, Central District Office.
- 3.** Parts baskets or parts shall not be removed from the solvent cleaning machine until dripping has stopped.
- 4.** During startup of the solvent cleaning machine, the primary condensers shall be turned on before the sump heater.
- 5.** During shutdown of the solvent cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
- 6.** When solvent is added or drained from the solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.
- 7.** The solvent cleaning machine and its associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the satisfaction of the Ohio EPA, Central District Office to achieve the same or better results as those recommended by the manufacturer.
- 8.** The permittee shall complete and pass the applicable sections of the test of solvent cleaning operating procedures in 40 CFR, Part 63, Appendix A if requested during an inspection by the Ohio EPA, Central District Office.
- 9.** Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but must not allow liquid solvent to drain from the container.
- 10.** Sponges, fabric, wood, and paper products shall not be cleaned.
- 11.** The permittee shall ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10 degrees Fahrenheit above the solvent's boiling point.
- 12.** The permittee shall ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system are followed.
- 13.** The permittee shall ensure that parts remain within the superheated vapor zone for at least the minimum proper dwell time.

II. Operational Restrictions (continued)

14. The permittee shall ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute (50 feet per minute) at any time as measured using the procedures in 40 CFR, Part 63.466 (d).
15. The permittee shall establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in 40 CFR, Part 63.466 (d).
16. The solvent cleaning machine methylene chloride usage shall not exceed 10,678 net gallons per year.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor the hoist speed as described below:
 - a. The permittee shall determine the hoist speed by measuring the time it takes for the hoist to travel a measured distance. The speed is equal to the distance in meters divided by the time in minutes (meters per minute).
 - b. The permittee shall conduct monthly monitoring of the hoist speed. If after the first year, no exceedances of the hoist speed are measured, the permittee may begin monitoring the hoist speed quarterly.
 - c. If an exceedance of the hoist speed occurs during quarterly monitoring, the permittee shall return to a monthly monitoring frequency until another year of compliance without an exceedance is demonstrated.
 - d. If the permittee can demonstrate to the satisfaction of the Ohio EPA, Central District Office in the initial compliance report that the hoist speed cannot exceed a speed of 3.4 meters per minute (11 feet per minute), the required monitoring frequency is quarterly, including during the first year of compliance.
2. The permittee shall maintain the following records in written or electronic form for the lifetime of the solvent cleaning machine:
 - a. Owner's manuals, or if not available, written maintenance and operating procedures for the solvent cleaning machine and control equipment.
 - b. The date of installation for the solvent cleaning machine and all of its control devices. If the exact date for the installation is not known, a letter certifying that the cleaning machine and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted.
 - c. Records of the halogenated hazardous air pollutant (HAP) solvent content for the solvent used in the solvent cleaning machine.
3. The permittee shall maintain the following records in written or electronic form for a period of five years for the solvent cleaning machine:
 - a. The results of control device monitoring required in this section of the permit.
 - b. Information on the actions taken to comply with 40 CFR 63.463 (e) and (f), including records of written or verbal orders for replacement parts, a description of the repair made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.
4. The permittee shall conduct monitoring and record the results on a weekly basis for the superheated vapor system by using a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode.

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

5. The permittee shall conduct monitoring and record the results for the full enclosure used to achieve a reduced room draft as specified below:
 - a. The permittee shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the windspeed within the enclosure using the procedure described below:
 - i. determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located; and
 - ii. record the maximum wind speed.
 - b. The permittee shall conduct a monthly visual inspection of the enclosure to determine if it is free of cracks, holes, and other defects.
6. The permittee shall collect and record the following information on a monthly basis for the solvent cleaning machine:
 - a. the total methylene chloride usage (methylene chloride added to the degreaser), in gallons, and the amount of materials collected for recycle and/or disposal at an outside facility (materials that are tightly covered and collected for recycle and/or disposal at an outside facility shall be recorded and subtracted from the total gallons usage record);
 - b. total net methylene chloride usage, in gallons;
 - c. the OC content of methylene chloride, in pounds of OC per gallon of methylene chloride;
 - d. the total OC emissions, in pounds;
 - e. the total hours of operation for this emissions unit; and
 - f. the calculated average hourly OC emissions, i.e., [(d) / (e)].

IV. Reporting Requirements

1. The permittee shall submit an annual report by February 1 of each year for the preceding year. Each annual report shall contain the following:
 - a. A signed statement from the facility owner or their designee stating that, "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required pursuant to 40 CFR 60.463(d)(10)."
 - b. Calculations of the total OC emissions, in tons.
- 2.a The permittee shall submit an exceedance report on a semiannual basis. The written reports shall be submitted every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months, and shall contain the following:
 - a. any occasion when the temperature of the solvent vapor at the center of the superheated vapor zone was less than 10 degrees Fahrenheit above the solvent's boiling point, and no correction was made within 15 days of detection; and
 - b. any occasion when the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure exceeded 15.2 meters per minute (50 feet per minute) as measured using the procedures in 40 CFR Part 63.466 (d).

IV. Reporting Requirements (continued)

- 2.b** Once an exceedance has occurred, 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 Ohio EPA, Central District Office. The permittee may receive approval of less frequent reporting if the following conditions are met:
- a. the emissions unit has demonstrated a full year of compliance without an exceedance;
 - b. the permittee continues to comply with all relevant recordkeeping and monitoring requirements specified in 40 CFR 63.1, General Provisions; and
 - c. the Ohio EPA, Central District Office does not object to a reduced frequency of reporting for the affected emissions unit as provided in paragraph (e) (3) (iii) of Subpart A, 40 CFR 63.1, General Provisions.
- 2.c** Each exceedance report shall contain the following:
- a. The reason and a description of the exceedance and action(s) taken to comply with 40 CFR 63.463(e) and (f) including written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to acceptable levels.
 - b. If no exceedance has occurred, a statement to that effect shall be submitted.
- 3.** The permittee shall submit annual reports that specify the total amount of solvent employed, in gallons, during the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

- 1.** Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):
- 1.a** Emission Limitation:
- OC emissions shall not exceed 9.8 pounds per hour.
- Applicable Compliance Method:
- Compliance shall be based upon the record keeping requirements specified in section A.III.6 of this permit.
- 1.b** Emission Limitation:
- OC emissions shall not exceed 43 tons per year.
- Applicable Compliance Method:
- Compliance shall be based upon the summation of the monthly OC emissions per the record keeping requirements specified in section A.III.6 of this permit.
- 1.c** Material Usage Restriction:
- The solvent cleaning machine methylene chloride usage shall not exceed 10,678 net gallons per year.
- Applicable Compliance Method:
- Compliance shall be based upon the summation of the monthly gallon usage per the record keeping requirements specified in section A.III.6 of this permit.

V. Testing Requirements (continued)

- 1.d** 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 PTE shall be determined in accordance with the following procedures:

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).

= 8,760 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 discussed below.

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).

Finally, sum the PTE_i for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

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>
in-line conveyorized vapor degreaser for heat exchangers and parts, with superheated vapor system		

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: Automatic Tube Cleaner (30mm ED line) (L014)

Activity Description: Solvent Cleaning Process

A. State and Federally 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>
automatic tube cleaner for 30mm ED line	OAC rule 3745-31-05(A)(3) (PTI 01-4502)	Volatile organic compound (VOC) emissions shall not exceed 1.9 pounds per hour and 8.3 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(O)(4).
	OAC rule 3745-21-09(O)(4)	See sections A.II.1, 2 and 3 below.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The automatic tube cleaner shall employ equipment, such as a drying tunnel or rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor.
- The automatic tube cleaner shall be equipped with covers that shall be used to close off the entrance and exit of the unit when it is not in use.

II. Operational Restrictions (continued)

3. The automatic tube cleaner shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:
 - a. Use no workplace fans near the cleaner opening, and ensure that exhaust ventilation does not exceed 65 cubic feet per minute per square foot of cleaner opening, unless a higher rate is necessary to meet Occupational Safety and Health Administration requirements.
 - b. Minimize openings during operation so that entrances and exits silhouette workloads with an average clearance between the parts and the edge of the cleaner opening of less than 10 percent of the width of the opening.
 - c. Provide downtime covers for closing off the entrance and exit during shutdown hours.
 - d. Minimize carry-out emissions by:
 - i. Racking parts so that solvent drains freely from parts and is not trapped.
 - ii. Maintaining the vertical conveyor speed at less than 11 feet per minute.
 - e. Store waste solvent only in covered containers.
 - f. Repair solvent leaks immediately, or shut down the cleaner.
 - g. Operate the cleaner such that water cannot be visually detected in solvent exiting the water separator.
 - h. Place downtime covers over entrances and exits of the cleaner at all times when the conveyors and exhausts are not being operated.
 - i. Clean only materials that are neither porous nor absorbent.
4. The permittee shall not employ any halogenated solvents in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a daily basis for the automatic tube cleaner:
 - a. the name and identification number for each solvent employed;
 - b. the total gallons of each solvent employed;
 - c. the VOC content of each solvent as applied, expressed as pounds of VOC per gallon of solvent;
 - d. the total VOC emissions from all solvents employed, in pounds, i.e., the sum of [(b) x (c)] for each solvent;
 - e. the total hours of operation for the emissions unit; and
 - f. the calculated average hourly VOC emissions, in pounds per hour, i.e., [(d) / (e)].

IV. Reporting Requirements

1. The permittee shall submit an annual report that specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the pounds per hour VOC limitation.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

1.9 pounds of VOC per hour

Applicable Compliance Method:

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

1.b Emission Limitation:

8.3 tons of VOC per year

Applicable Compliance Method:

Compliance shall be based upon the summation of the daily VOC emissions per the record keeping requirements specified in section A.III.1 of this permit.

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>
automatic tube cleaner for 30mm ED line		

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: Automatic Tube Cleaner (24 mm ED line) (L015)

Activity Description: Solvent Cleaning Process

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>
automatic tube cleaner, 24 mm ED line, with catalytic incinerator	OAC rule 3745-31-05(A)(3) (PTI 01-08192)	Volatile organic compound (VOC) emissions shall not exceed 1.0 pound per hour and 4.38 tons per year. See sections A.I.2.a and A.II.1 below.
	OAC rule 3745-21-09(O)(4)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(O)(4). See sections A.II.2, 3 and 4 below.

2. Additional Terms and Conditions

- 2.a The facility shall employ a catalytic incinerator with a minimum control efficiency of 95% to control VOC emissions from this emissions unit whenever the emissions unit is in operation.

II. Operational Restrictions

1. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.
2. The automatic tube cleaner shall employ equipment, such as a drying tunnel or rotating (tumbling) basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor.
3. The automatic tube cleaner shall be equipped with covers that shall be used to close off the entrance and exit of the unit when it is not in use.

II. Operational Restrictions (continued)

4. The automatic tube cleaner shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:
 - a. Use no workplace fans near the cleaner opening, and ensure that exhaust ventilation does not exceed 65 cubic feet per minute per square foot of cleaner opening, unless a higher rate is necessary to meet Occupational Safety and Health Administration requirements.
 - b. Minimize openings during operation so that entrances and exits silhouette workloads with an average clearance between the parts and the edge of the cleaner opening of less than 10 percent of the width of the opening.
 - c. Provide downtime covers for closing off the entrance and exit during shutdown hours.
 - d. Minimize carry-out emissions by:
 - i. Racking parts so that solvent drains freely from parts and is not trapped.
 - ii. Maintaining the vertical conveyor speed at less than 11 feet per minute.
 - e. Store waste solvent only in covered containers.
 - f. Repair solvent leaks immediately, or shut down the cleaner.
 - g. Operate the cleaner such that water cannot be visually detected in solvent exiting the water separator.
 - h. Place downtime covers over entrances and exits of the cleaner at all times when the conveyors and exhausts are not being operated.
 - i. Clean only materials that are neither porous nor absorbent.
5. The permittee shall not employ any halogenated solvents in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - c. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

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

3. The permittee shall collect and record the following information each month for this emissions unit:
 - a. the name and identification number of each solvent employed;
 - b. the number of gallons of each solvent employed;
 - c. the VOC content of each solvent employed, in pounds per gallon;
 - d. the total uncontrolled VOC emission rate for all solvents employed, in pounds [i.e., the summation of (b) x (c) for all solvents employed]; and
 - e. the total controlled VOC emissions rate for all solvents employed, in pounds [i.e., (d) x (the control efficiency from the most recent emission test that demonstrated the emission unit was in compliance)];
 - f. the total hours of operation; and
 - g. the average hourly controlled VOC emission rate, in pounds per hour, i.e., [(e) / (f)].
4. The permittee shall collect and record the total VOC emissions for the calendar year (i.e., summation of A.III.3.e for each month of the calendar year).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed does not comply with the temperature limitations specified above.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that summarize the total VOC emissions from this emissions unit. Each report shall be submitted by January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:

catalytic incinerator with a minimum control efficiency of 95%

Applicable Compliance Method:

The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the minimum control efficiency requirements of section A.I.2.a in accordance with the following requirements:

- i. The emission testing shall be conducted within 12 months prior to permit expiration.
- ii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- iii. The test(s) shall be conducted while this emissions unit is venting VOC emissions to the catalytic incinerator. This emissions unit shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

1.b Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

1.c Emission Limitation:

1.0 pound of VOC per hour

Applicable Compliance Method:

Compliance with the pound per hour VOC emission limitation shall be determined by the record keeping specified in section A.III.3.

In addition, compliance with the hourly VOC emission limitation shall be determined in accordance with the emission testing requirement specified in section A.V.1.

V. Testing Requirements (continued)

1.d Emission Limitation:

4.38 tons of VOC per year

Applicable Compliance Method:

Compliance with the annual VOC emission limitation shall be determined by the record keeping specified in section A.III.4.

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>
automatic tube cleaner, 24 mm ED line, with catalytic incinerator		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for emissions unit L015, PTI 01-08382, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: Aliphatic petroleum distillates (stoddard solvent)

TLV (mg/m3): 525

Maximum Hourly Emission Rate (lbs/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 95.51

MAGLC (ug/m3): 12,500

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

2. 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, 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.

3. 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 burn off oven (N001)
Activity Description: Pyrolysis type incinerator

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 burnoff oven	OAC rule 3745-31-05(A)(3) (PTI 01-08040)	Particulate emissions (PE) shall not exceed 0.51 ton of PE per year. See sections A.I.2.a and A.II.1 below.
	OAC rule 3745-17-09	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-09. 0.20 pound of PE per 100 pounds of salvageable material charged
	OAC rule 3745-17-07(A)	See section A.I.2.b below. Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

- 2.a** The ton per year PE limit reflects the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.b** This emissions unit shall be designed, operated, and maintained so as to prevent the emission of objectionable odors.

II. Operational Restrictions

1. The temperature of the secondary combustion chamber of the paint burnoff oven shall be maintained at 1,200 degrees Fahrenheit or greater.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature, in degrees Fahrenheit, of the secondary combustion chamber of the paint burnoff oven. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations with any modifications deemed necessary by the permittee. The monitoring and recording devices shall be capable of accurately measuring the desired parameter.

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

2. The permittee shall maintain a log of all periods of time when the emissions unit is in operation and the secondary combustion chamber was less than 1,200 degrees Fahrenheit.
3. The permittee shall perform weekly inspections, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from this emissions unit. The presence or absence of any visible PE's shall be noted in an operations log. If visible PE's are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all time periods when the secondary combustion temperature was below 1,200 degrees Fahrenheit, as well as the corrective action(s) taken.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE's were observed from the emissions unit and (b) describe any corrective actions taken to eliminate the visible PE's. These reports shall be submitted to the Ohio EPA, Central District Office by January 31, and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

0.20 pound of PE per 100 pounds of salvageable material charged

Applicable Compliance Method:

The permittee shall conduct, or have conducted, PE emission testing for this emissions unit to demonstrate compliance with the 0.20 pound of PE per 100 pounds of salvageable material charged emission limitation in accordance with the following requirements:

- i. The emission testing shall be conducted within 3 months after issuance of the permit.
- ii. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate for particulates: 40 CFR, Part 60, Appendix A, Methods 1 through 5.
- iii. The test(s) shall be conducted while this emissions unit is operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

- 1.b** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

- 1.c** Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.d** Emission Limitation:

0.51 ton of PE per year

Applicable Compliance Method:

This limit is based on the maximum rated capacity of the emissions unit (58 lbs of salvageable material per hour) times the allowable emission limit of 0.20 lb particulate per 100 lbs salvageable material charged and the maximum operating schedule of 8,760 hours per year, divided by 2,000 lbs per ton.

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>
paint burnoff oven		

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: Evaporator GMA (P002)
Activity Description: Chemical conversion coating with scrubbers

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>
evaporator acid cleaning (with spray chamber scrubber) and RZ coating line with drying oven	OAC rule 3745-31-05(A)(3) (PTI 01-08382)	<p>Volatile organic compound (VOC) emissions shall not exceed 1.67 pounds per hour and 7.31 tons per year.</p> <p>Nitrogen oxides (NOx) emissions shall not exceed 0.56 pound per hour and 2.45 tons per year.</p> <p>Nitric acid (HNO₃) emissions shall not exceed 0.55 pound per hour and 2.41 tons per year.</p> <p>Sulfuric acid (H₂SO₄) emissions shall not exceed 0.05 pound per hour and 0.22 ton per year.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1)(i).</p>
	OAC rule 3745-21-09(U)(1)(i)	<p>See sections A.I.2.a and b, and A.II.1 and 2 below.</p> <p>The VOC content of each coating employed shall not exceed 3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied.</p>

2. Additional Terms and Conditions

- 2.a The pounds per hour VOC and NOx emission limitations reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these hourly limits.

2. Additional Terms and Conditions (continued)

- 2.b** The facility shall employ the spray chamber scrubber to control HNO₃ and H₂SO₄ emissions from this emissions unit whenever the emissions unit is in operation.
- 2.c** No cleanup materials shall be employed in this emissions unit.

II. Operational Restrictions

- 1.** The pressure drop across the spray chamber scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.
- 2.** The water flow rate for the spray chamber scrubber shall be continuously maintained at a value of not less than 60 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content of each coating, expressed as pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied;
 - c. the total gallons of each coating employed; and
 - d. the total VOC emissions from all coatings employed, in pounds, i.e., the sum of [(b) x (c)] for all coatings.
- 2.** The permittee shall collect and record the total VOC emissions for the calendar year (summation of the daily VOC emissions as recorded in A.III.1.d, and divided by 2,000 pounds/ton).
- 3.** The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the spray chamber scrubber (controlling the HNO₃ and H₂SO₄ emissions) and the spray chamber scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

- a. the pressure drop across the scrubber, in inches of water, on a once per shift basis;
- b. the scrubber water flow rate, in gallons per minute, on a once per shift basis; and
- c. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

- 1.** The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing the use of noncomplying coatings (i.e., for VOC content). The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
- 2.** The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

IV. Reporting Requirements (continued)

3. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber parameters for the spray chamber scrubber controlling the HNO₃ and H₂SO₄ emissions were not maintained at or above the required levels stated above in sections A.II.1 and 2.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations and VOC content limitation of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

1.67 pounds of VOC per hour

Applicable Compliance Method:

The hourly VOC emission limitation was established using the following calculations:

3.62 grams of VOC (RZ coating) per each core is volatilized in the drying oven.

Maximum production capacity of 210 cores per hour.

$(210 \text{ cores/hour}) \times (3.62 \text{ grams VOC/core}) \times (1 \text{ pound}/454 \text{ g}) = 1.67 \text{ pounds of VOC/hour}$

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

- 1.b Emission Limitation:

7.31 tons of VOC per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly emission limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

- 1.c Emission Limitation:

3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance with the VOC content limitation for coatings shall be based upon the record keeping requirements specified in section A.III.1. In accordance with OAC rule 3745-21-04(B)(5), U.S. EPA Method 24 shall be used to determine the VOC contents for coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the owner or operator shall so notify the Administrator of the U.S. EPA and shall use formulation data for that coating to demonstrate compliance until the U.S. EPA provides alternative analytical procedures or alternative precision statements for Method 24. Note: The Method 24 data may be supplied by the coating manufacturer.

V. Testing Requirements (continued)

1.d Emission Limitation:

0.56 pound of NOx per hour

Applicable Compliance Method:

If required, NOx emissions testing shall be conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7E.

This facility demonstrated compliance with this emission limitation through emissions testing on a similar emissions unit conducted on March 1, 2001.

1.e Emission Limitation:

2.45 tons of NOx per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.f Emission Limitation:

0.55 pound of HNO3 per hour

Applicable Compliance Method:

The hourly HNO3 emission limitation was developed using the following calculations:

The capture efficiency was assumed to be 90% and the control efficiency of the spray chamber scrubber was assumed to be 99%.

$(5 \text{ pounds HNO}_3/\text{hour}) \times (0.90) \times (1 - 0.99) = 0.045 \text{ pound/hour stack controlled emissions}$

$(5 \text{ pounds HNO}_3/\text{hour}) \times (0.10) = 0.5 \text{ pound/hour fugitive (uncontrolled) emissions}$

$0.045 \text{ pound/hour stack controlled emissions} + 0.5 \text{ pound/hour fugitive (uncontrolled) emissions} = 0.55 \text{ pound HNO}_3/\text{hour total emissions}$

*The 5 pounds of HNO3 per hour was established through the emissions testing conducted on March 1, 2000 for a similar emissions unit. Based on the controlled hourly emission rate, the assumed capture efficiency of 90%, and the assumed control efficiency of 99%, it was determined through back calculating that 5 pounds of HNO3 is emitted per hour (prior to control equipment).

If required, HNO3 emissions testing shall be conducted in accordance with 40 CFR Part 60, Appendix A, Method 26A.

The permittee demonstrated compliance with this emissions limit through emissions testing on a similar emissions unit conducted on March 1, 2001.

V. Testing Requirements (continued)

1.g Emission Limitation:

2.41 tons of HNO₃ per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.h Emission Limitation:

0.05 pound of H₂SO₄ per hour

Applicable Compliance Method:

The hourly H₂SO₄ emission limitation was developed using the following calculations:

The capture efficiency was assumed to be 90% and the control efficiency of the spray chamber scrubber was assumed to be 99%.

$(0.44 \text{ pound of H}_2\text{SO}_4/\text{hour}) \times (0.90) \times (1 - 0.99) = 0.004 \text{ pound of H}_2\text{SO}_4/\text{hour stack controlled emissions}$

$(0.44 \text{ pound of H}_2\text{SO}_4/\text{hour}) \times (0.10) = 0.044 \text{ pound of H}_2\text{SO}_4/\text{hour fugitive (uncontrolled) emissions}$

$0.004 \text{ pound of H}_2\text{SO}_4/\text{hour stack controlled emissions} + 0.044 \text{ pound of H}_2\text{SO}_4/\text{hour fugitive (uncontrolled) emissions} = 0.05 \text{ pound of H}_2\text{SO}_4/\text{hour total emissions}$

*The 0.44 pound of H₂SO₄ per hour was established through the emissions testing conducted on March 1, 2000 for a similar emissions unit. Based on the controlled hourly emission rate, the assumed capture efficiency of 90%, and the assumed control efficiency of 99%, it was determined through back calculating that 0.44 pounds of H₂SO₄ is emitted per hour (prior to control equipment).

If required, H₂SO₄ emissions testing shall be conducted in accordance with 40 CFR, Part 60, Appendix A, Method 26A.

The permittee demonstrated compliance with this emission limitation through emissions testing on a similar emissions unit conducted on March 1, 2001.

1.i Emission Limitation:

0.22 ton of H₂SO₄ per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

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>
evaporator acid cleaning (with spray chamber scrubber) and RZ coating line with drying oven		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for emissions unit P002, PTI 01-08382, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: HNO3

TLV (mg/m3): 5.2

Maximum Hourly Emission Rate (lbs/hr): 0.55

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 29.32

MAGLC (ug/m3): 123.8

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

2. 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, 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.

3. 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: Roller Leveler: 30 mm line (P013)

Activity Description: Rolls and levels copier tubes; uses low odor base solvent.

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>
roller leveler for 30 mm ED line	OAC rule 3745-31-05(A)(3) (PTI 01-1912)	Volatile organic compound (VOC) emissions shall not exceed 1.92 pounds per hour and 5.75 tons per year. See section A.II.1 below.
	OAC rule 3745-21-09(U)(2)(e)	The coating usage exemption level specified by this rule is less stringent than the coating usage restriction established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The coating usage in this emissions unit shall not exceed 6.9 gallons per day.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the name and identification number of each coating employed;
 - b. the total gallons of each coating employed;
 - c. the VOC content of each coating employed, in pounds of VOC per gallon of coating;
 - d. the total VOC emissions from this emissions unit [i.e., the sum of (c) x (d) for all coatings employed];
 - e. the total gallons of all coatings employed;
 - f. the total hours of operation for this emissions unit; and
 - g. the calculated average hourly VOC emissions, i.e., [(d) / (f)].

IV. Reporting Requirements

1. The permittee shall submit an annual report that specifies the total VOC emissions, in tons, from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.
2. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the roller leveler employs more than the applicable maximum daily solvent usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations and solvent usage restriction of these terms and conditions shall be determined in accordance with the following method(s):
 - 1.a Emission Limitation:

1.92 pounds of VOC per hour

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.
 - 1.b Emission Limitation:

5.75 tons of VOC per year

Applicable Compliance Method:

Compliance shall be based upon the summation of the daily VOC emissions per the record keeping specified in section A.III.1 of this permit.
 - 1.c Solvent Usage Restriction:

Solvent usage shall not exceed 6.9 gallons per day.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.
2. USEPA Method 24 shall be used to determine the VOC contents for the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

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>
roller leveler for 30 mm ED line		

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: Evaporator Fin Machine #1 (P017)

Activity Description: Fin machine

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>
evaporator fin machine number 1 for stamping of fin material	OAC rule 3745-31-05(A)(3) (PTI 01-8040)	Volatile organic compound (VOC) emissions shall not exceed 2.85 pounds per hour and 12.48 tons per year. See section A.I.2.a below.
	OAC rule 3745-21-09(U)(2)(e)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e). See section A.II.1 below.

2. Additional Terms and Conditions

- 2.a The pounds per hour of VOC limitation reflects the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

II. Operational Restrictions

1. Evaporator oil usage shall not exceed ten (10) gallons per day.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the evaporator fin machine:
 - a. the name and identification number of each evaporator oil employed;
 - b. the total gallons of evaporator oil employed;
 - c. the VOC content of the evaporator oil employed, in pounds per gallon; and
 - d. the total VOC emissions, in pounds [(b) x (c)];
2. The permittee shall collect and record the total VOC emissions for the calendar month (summation of section A.III.1.d for each day of the calendar month).

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

3. The permittee shall collect and record the total VOC emissions, in tons, for the calendar year (summation of section A.III.2 for each month of the calendar year).

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the evaporator fin machine employed more than the maximum daily evaporator oil usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emissions limitation and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

2.85 pounds of VOC per hour

Applicable Compliance Method:

The hourly VOC emission limitation was established by the following calculations:

Maximum of ten (10) gallons of oil (the functional coating) used per day

VOC content of oil is 6.84 pounds per gallon

$(\text{Maximum of 10 gallons/day}) \times (6.84 \text{ pounds VOC/gallon}) \times (\text{one day}/24 \text{ hours}) = 2.85 \text{ pounds of VOC/hour}$

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

1.b Emission Limitation:

12.48 tons of VOC per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.c Material Usage Restriction:

Evaporator oil usage shall not exceed ten (10) gallons per day.

Applicable Compliance Method:

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

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>
evaporator fin machine number 1 for stamping of fin material		

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: Condenser Core Builder #1 (P018)

Activity Description: Form condenser fins and remove forming oil by heating

A. State and Federally 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>
condenser core building line number 1 and oven, with thermal incinerator	OAC rule 3745-31-05(A)(3) (PTI 01-08247)	Volatile organic compound (VOC) emissions shall not exceed 0.68 pound per hour and 2.98 tons per year.
	OAC rule 3745-21-09(U)(2)(e)	See sections A.I.2.a, and A.II.1 and 2 below. The coating usage exemption level specified by this rule is less stringent than the coating usage restriction established by OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** The permittee shall employ a thermal incinerator with a minimum control efficiency of 95% to control VOC emissions from the oven whenever the emissions unit is in operation.

II. Operational Restrictions

- The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,350 degrees Fahrenheit.
- Condenser core building line oil usage shall not exceed eight (8) gallons per day.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

2. The permittee shall collect and record the following information for each day:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1,350 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall collect and record the following information each day for the condenser core building line:
 - a. the name and identification number of each condenser oil employed;
 - b. the number of gallons of each condenser oil employed;
 - c. the total gallons of all condenser oil employed;
 - d. the VOC content of each condenser oil employed, in pounds per gallon;
 - e. the total hours of operation;
 - f. the total uncontrolled VOC emission rate from the production line, in pounds/hour [i.e., the summation of {(b) x (d)}/(e) for all condenser oils employed, minus 0.6 lb/hour* (from fugitive emissions)];
 - g. the total controlled VOC emission rate from the oven, in pounds/hour [i.e., (f) x (the control efficiency from the most recent emission test that demonstrated the emissions unit was in compliance)]; and
 - h. the total average hourly VOC emission rate, in pounds/ hour [i.e., (g) plus 0.6 lb/hour (from fugitive emissions)].*

* The 0.6 lb/hour VOC fugitive emission rate from the production line was determined by the permittee through mass balance calculations. The total hourly VOC emission rate equals the controlled VOC emissions from the oven, plus the fugitive VOC emissions from the production line.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
2. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the condenser core building line employed more than the maximum daily condenser oil usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
4. The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

thermal incinerator with a minimum control efficiency of 95%

Applicable Compliance Method:

The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the minimum control efficiency requirements of section A.I.2.a in accordance with the following requirements:

i. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.

ii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

iii. The test(s) shall be conducted while this emissions unit is venting VOC emissions to the thermal incinerator. This emissions unit shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

1.b Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

1.c Emission Limitation:

0.68 pound of VOC per hour

Applicable Compliance Method:

Compliance with the pound per hour VOC emission limitation shall be determined by the record keeping specified in section A.III.3.

In addition, compliance with the hourly VOC emission limitation shall be determined in accordance with the emission testing requirement specified in section A.V.1.

V. Testing Requirements (continued)

1.d Emission Limitation:

2.98 tons of VOC per year

Applicable Compliance Method:

Compliance with the annual VOC emission limitation is ensured if compliance is maintained with the hourly VOC emission limitation (the annual VOC emission limitation was determined by multiplying the hourly VOC emission limitation and dividing by 2,000 lbs/ton).

1.e Material Usage Restriction:

Condenser core building line oil usage shall not exceed eight (8) gallons per day.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section A.III.3 of this permit.

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>
condenser core building line number 1 and oven, with thermal incinerator		

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: Condenser Core Builder #2 (P019)

Activity Description: Form condenser fins and remove forming oil by heating

A. State and Federally 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>
condenser core building line number 2 and oven, with thermal incinerator	OAC rule 3745-31-05(A)(3) (PTI 01-08247)	Volatile organic compound (VOC) emissions shall not exceed 0.68 pound per hour and 2.98 tons per year.
	OAC rule 3745-21-09(U)(2)(e)	See sections A.I.2.a, and A.II.1 and 2 below. The coating usage exemption level specified by this rule is less stringent than the coating usage restriction established by OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** The permittee shall employ a thermal incinerator with a minimum control efficiency of 95% to control VOC emissions from the oven whenever the emissions unit is in operation.

II. Operational Restrictions

- The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,350 degrees Fahrenheit.
- Condenser core building line oil usage shall not exceed eight (8) gallons per day.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

2. The permittee shall collect and record the following information for each day:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1,350 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall collect and record the following information each day for the condenser core building line:
 - a. the name and identification number of each condenser oil employed;
 - b. the number of gallons of each condenser oil employed;
 - c. the total gallons of all condenser oil employed;
 - d. the VOC content of each condenser oil employed, in pounds per gallon;
 - e. the total hours of operation;
 - f. the total uncontrolled VOC emission rate from the production line, in pounds/hour [i.e., the summation of {(b) x (d)}/(e) for all condenser oils employed, minus 0.6 lb/hour* (from fugitive emissions)];
 - g. the total controlled VOC emission rate from the oven, in pounds/hour [i.e., (f) x (the control efficiency from the most recent emission test that demonstrated the emissions unit was in compliance)]; and
 - h. the total average hourly VOC emission rate, in pounds/ hour [i.e., (g) plus 0.6 lb/hour (from fugitive emissions)].*

* The 0.6 lb/hour VOC fugitive emission rate from the production line was determined by the permittee through mass balance calculations. The total hourly VOC emission rate equals the controlled VOC emissions from the oven, plus the fugitive VOC emissions from the production line.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
2. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the condenser core building line employed more than the maximum daily condenser oil usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
4. The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

thermal incinerator with a minimum control efficiency of 95%

Applicable Compliance Method:

The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the minimum control efficiency requirements of section A.I.2.a in accordance with the following requirements:

i. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.

ii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

iii. The test(s) shall be conducted while this emissions unit is venting VOC emissions to the thermal incinerator. This emissions unit shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

1.b Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

1.c Emission Limitation:

0.68 pound of VOC per hour

Applicable Compliance Method:

Compliance with the pound per hour VOC emission limitation shall be determined by the record keeping specified in section A.III.3.

In addition, compliance with the hourly VOC emission limitation shall be determined in accordance with the emission testing requirement specified in section A.V.1.

V. Testing Requirements (continued)

1.d Emission Limitation:

2.98 tons of VOC per year

Applicable Compliance Method:

Compliance with the annual VOC emission limitation is ensured if compliance is maintained with the hourly VOC emission limitation (the annual VOC emission limitation was determined by multiplying the hourly VOC emission limitation and dividing by 2,000 lbs/ton).

1.e Material Usage Restriction:

Condenser core building line oil usage shall not exceed eight (8) gallons per day.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section A.III.3 of this permit.

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>
condenser core building line number 2 and oven, with thermal incinerator		

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: Condenser Core Builder #3 (P020)

Activity Description: Form condenser fins and remove forming oil by heating

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>
condenser core building line number 3 and 2 ovens, with thermal incinerator	OAC rule 3745-31-05(A)(3) (PTI 01-08247)	Volatile organic compound (VOC) emissions shall not exceed 0.68 pound per hour and 2.98 tons per year.
	OAC rule 3745-21-09(U)(2)(e)	See sections A.I.2.a, and A.II.1 and 2 below. The coating usage exemption level specified by this rule is less stringent than the coating usage restriction established by OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The permittee shall employ a thermal incinerator with a minimum control efficiency of 95% to control VOC emissions from the ovens whenever the emissions unit is in operation.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,350 degrees Fahrenheit.
2. Condenser core building line oil usage shall not exceed eight (8) gallons per day.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

2. The permittee shall collect and record the following information for each day:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1,350 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall collect and record the following information each day for the condenser core building line:
 - a. the name and identification number of each condenser oil employed;
 - b. the number of gallons of each condenser oil employed;
 - c. the total gallons of all condenser oil employed;
 - d. the VOC content of each condenser oil employed, in pounds per gallon;
 - e. the total hours of operation;
 - f. the total uncontrolled VOC emission rate from the production line, in pounds/hour [i.e., the summation of {(b) x (d)}/(e) for all condenser oils employed, minus 0.6 lb/hour* (from fugitive emissions)];
 - g. the total controlled VOC emission rate from the oven, in pounds/hour [i.e., (f) x (the control efficiency from the most recent emission test that demonstrated the emissions unit was in compliance)]; and
 - h. the total average hourly VOC emission rate, in pounds/ hour [i.e., (g) plus 0.6 lb/hour (from fugitive emissions)].*

* The 0.6 lb/hour VOC fugitive emission rate from the production line was determined by the permittee through mass balance calculations. The total hourly VOC emission rate equals the controlled VOC emissions from the oven, plus the fugitive VOC emissions from the production line.
4. The permittee shall collect and record the total VOC emissions for the calendar year (summation of A.III.3.i for all days of the calendar year).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
2. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the condenser core building line employed more than the maximum daily condenser oil usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

4. The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

thermal incinerator with a minimum control efficiency of 95%

Applicable Compliance Method:

The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the minimum control efficiency requirements of section A.1.2.a in accordance with the following requirements:

- i. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.
- ii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- iii. The test(s) shall be conducted while this emissions unit is venting VOC emissions to the thermal incinerator. This emissions unit shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

- 1.b Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

1.c Emission Limitation:

0.68 pound of VOC per hour

Applicable Compliance Method:

Compliance with the pound per hour VOC emission limitation shall be determined by the record keeping specified in section A.III.3.

In addition, compliance with the hourly VOC emission limitation shall be determined in accordance with the emission testing requirement specified in section A.V.1.

1.d Emission Limitation:

2.98 tons of VOC per year

Applicable Compliance Method:

Compliance with the annual VOC emission limitation is ensured if compliance is maintained with the hourly VOC emission limitation (the annual VOC emission limitation was determined by multiplying the hourly VOC emission limitation and dividing by 2,000 lbs/ton).

1.e Material Usage Restriction:

Condenser core building line oil usage shall not exceed eight (8) gallons per day.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section A.III.3 of this permit.

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>
condenser core building line number 3 and oven, with thermal incinerator		

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: Roller Leveler: 24 mm line (P023)

Activity Description: Rolls and levels copier tubes. Equipped with catalytic incinerator.

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>
roller leveler, 24 mm line, with catalytic incinerator	OAC rule 3745-31-05(A)(3) (PTI 01-08192)	Volatile organic compound (VOC) emissions shall not exceed 0.2 pound per hour and 0.88 ton per year. See sections A.I.2.a and A.II.1 below.
	OAC rule 3745-21-09(U)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U). See section A.I.2.b below.

2. Additional Terms and Conditions

- 2.a The facility shall employ a catalytic incinerator with a minimum control efficiency of 95% to control VOC emissions from this emissions unit whenever the emissions unit is in operation.
- 2.b In accordance with OAC rule 3745-21-09(B)(6), in lieu of complying with the pounds of VOC per gallon of solids limitation contained in this rule, the permittee shall employ capture and control equipment that provide not less than an eighty one percent reduction, by weight, in the overall VOC emissions from this emissions unit and has a destruction efficiency of not less than ninety percent, by weight, for the VOC emissions vented to the control equipment.

II. Operational Restrictions

1. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 600 degrees Fahrenheit. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 600 degrees Fahrenheit;
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent emission test that demonstrated the emissions unit was in compliance.
 - c. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall collect and record the following information each month:
 - a. the name and identification number of each coating employed;
 - b. the number of gallons of each coating employed;
 - c. the VOC content of each coating employed, in pounds per gallon;
 - d. the total uncontrolled VOC emission rate for all coatings employed, in pounds [i.e., the summation of (b) x (c) for all coatings employed];
 - e. the total controlled VOC emissions rate for all coatings employed, in pounds [i.e., (d) x (the control efficiency from the most recent emission test that demonstrated the emission unit was in compliance)].
 - f. the total hours of operation; and
 - g. the average hourly controlled VOC emission rate, in pounds per hour, i.e., [(e) / (f)].
4. The permittee shall collect and record the total VOC emissions for the calendar year (the summation of A.III.3.e for each month of the calendar year).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed does not comply with the temperature limitations specified above.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

2. The permittee shall submit deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

3. The permittee shall submit an annual report that specifies the total VOC emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

catalytic incinerator with a minimum control efficiency of 95%

Applicable Compliance Method:

The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the minimum control efficiency requirements of section A.1.2.a in accordance with the following requirements:

- i. The emission testing shall be conducted within 12 months prior to permit expiration.
- ii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.
- iii. The test(s) shall be conducted while this emissions unit is venting VOC emissions to the catalytic incinerator. This emissions unit shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

- 1.b Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

V. Testing Requirements (continued)

1.c Emission Limitation:

0.2 pound of VOC per hour

Applicable Compliance Method:

Compliance with the pound per hour VOC emission limitation shall be determined by the record keeping specified in section A.III.3.

In addition, compliance with the hourly VOC emission limitation shall be determined in accordance with the emission testing requirement specified in section A.V.1.

1.d Emission Limitation:

0.88 ton of VOC per year

Applicable Compliance Method:

Compliance with the annual VOC emission limitation shall be determined by the record keeping 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>
roller leveler, 24 mm line, with catalytic incinerator		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Evaporator Fin Machine #2 (P028)

Activity Description: Fin machine

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>
evaporator fin machine number 2 for the stamping of fin material	OAC rule 3745-31-05(A)(3) (PTI 01-8040)	Volatile organic compound (VOC) emissions shall not exceed 2.85 pounds per hour and 12.48 tons per year. See section A.I.2.a below.
	OAC rule 3745-21-09(U)(2)(e)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e). See section A.II.1 below.

2. Additional Terms and Conditions

- 2.a The pounds per hour of VOC limitation reflects the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

II. Operational Restrictions

1. Evaporator oil usage shall not exceed ten (10) gallons per day.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the evaporator fin machine:
 - a. the name and identification number of each evaporator oil employed;
 - b. the total gallons of evaporator oil employed;
 - c. the VOC content of the evaporator oil employed, in pounds per gallon; and
 - d. the total VOC emissions, in pounds [(b) x (c)];
2. The permittee shall collect and record the total VOC emissions for the calendar month (summation of section A.III.1.d for each day of the calendar month).

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

3. The permittee shall collect and record the total VOC emissions for the calendar year (summation of section A.III.2 for each month of the calendar year).

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the evaporator fin machine employed more than the maximum daily evaporator oil usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports which specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

2.85 pounds of VOC per hour

Applicable Compliance Method:

The hourly VOC emission limitation was established by the following calculations:

Maximum of ten (10) gallons of oil (the functional coating) used per day

VOC content of oil is 6.84 pounds per gallon

$(\text{Maximum of 10 gallons/day}) \times (6.84 \text{ pounds of VOC/gallon}) \times (\text{one day}/24 \text{ hours}) = 2.85 \text{ pounds of VOC/hour}$

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

1.b Emission Limitation:

12.48 tons of VOC per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.c Material Usage Restriction:

Evaporator oil usage shall not exceed ten (10) gallons per day.

Applicable Compliance Method:

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

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>
evaporator fin machine number 2 for the stamping of fin material		

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: Evaporator Fin Machine #3 (P029)
Activity Description: Fin machine

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>
evaporator fin machine number 3 for stamping of fin material	OAC rule 3745-31-05(A)(3) (PTI 01-8040)	Volatile organic compound (VOC) emissions shall not exceed 2.85 pounds per hour and 12.48 tons per year. See section A.I.2.a below.
	OAC rule 3745-21-09(U)(2)(e)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e). See section A.II.1 below.

2. Additional Terms and Conditions

- 2.a The pounds per hour of VOC emission limitation reflects the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

II. Operational Restrictions

1. Evaporator oil usage shall not exceed ten (10) gallons per day.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the evaporator fin machine:
 - a. the name and identification number of each evaporator oil employed;
 - b. the total gallons of evaporator oil employed; and
 - c. the VOC content of the evaporator oil employed, in pounds; and
 - d. the total VOC emissions, in pounds [(b) x (c)].
2. The permittee shall collect and record the total VOC emissions for the calendar month (summation of section A.III.1.d for each day of the calendar month).

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

3. The permittee shall collect and record the total VOC emissions for the calendar year (summation of section A.III.2 for each month of the calendar year).

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the evaporator fin machine employed more than the maximum daily evaporator oil usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

2.85 pounds of VOC per hour

Applicable Compliance Method:

The hourly VOC emission limitation was established by the following calculations:

Maximum of ten (10) gallons of oil (the functional coating) used per day

VOC content of oil is 6.84 pounds per gallon

$(\text{Maximum } 10 \text{ gallons/day}) \times (6.84 \text{ pounds of VOC/gallon}) \times (\text{one day}/24 \text{ hours}) = 2.85 \text{ pounds of VOC/hour}$

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

1.b Emission Limitation:

12.48 tons of VOC per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.c Material Usage Restriction:

Evaporator oil usage shall not exceed ten (10) gallons per day.

Applicable Compliance Method:

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

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>
evaporator fin machine number 3 for stamping of fin material		

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: Condenser GMA (P033)
Activity Description: Chemical conversion coating with scrubbers

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>
condenser acid cleaning with spray chamber scrubber	OAC rule 3745-31-05(A)(3) (PTI 01-08382)	<p>Nitrogen oxides (NO_x) emissions shall not exceed 0.56 pound per hour and 2.45 tons per year.</p> <p>Nitric acid (HNO₃) emissions shall not exceed 0.61 pound per hour and 2.67 tons per year.</p> <p>Sulfuric acid (H₂SO₄) emissions shall not exceed 0.05 pound per hour and 0.22 ton per year.</p> <p>See sections A.I.2.a and b, and A.II.1 and 2 below.</p>

2. Additional Terms and Conditions

- 2.a The pound per hour NO_x emission limitation reflects the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.
- 2.b The facility shall employ a spray chamber scrubber to control HNO₃ and H₂SO₄ emissions from this emissions unit whenever the emissions unit is in operation.
- 2.c No cleanup material shall be employed in this emissions unit.

II. Operational Restrictions

1. The pressure drop across the spray chamber scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.
2. The water flow rate for the spray chamber scrubber shall be continuously maintained at a value of not less than 60 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the spray chamber scrubber (controlling the HNO₃ and H₂SO₄ emissions) and the spray chamber scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall collect and record the following information each day for the spray chamber scrubber controlling the HNO₃ and H₂SO₄ emissions:
 - a. the pressure drop across the spray chamber scrubber, in inches of water; and
 - b. the spray chamber scrubber water flow rate, in gallons per minute.
3. The permittee shall also record each day the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber parameters for the spray chamber scrubber controlling the HNO₃ and H₂SO₄ emissions were not maintained at or above the required levels stated above in sections A.II.1 and 2.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

0.56 pound of NO_x per hour

Applicable Compliance Method:

If required, NO_x emissions testing shall be conducted in accordance with 40 CFR, Part 60, Appendix A, Method 7E.

This facility demonstrated compliance with this emission limitation through emissions testing conducted on March 1, 2001.

1.b Emission Limitation:

2.45 tons of NO_x per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

V. Testing Requirements (continued)

1.c Emission Limitation:

0.61 pound of HNO₃ per hour

Applicable Compliance Method:

The hourly HNO₃ emission limitation was developed using the following calculations:

The capture efficiency was assumed to be 90% and the control efficiency of the scrubber was assumed to be 99%.

$(5.6 \text{ pounds of HNO}_3/\text{hour}) \times (0.90) \times (1 - 0.99) = 0.05 \text{ pound of HNO}_3/\text{hour stack controlled emissions}$

$(5.6 \text{ pounds of HNO}_3/\text{hour}) \times (0.10) = 0.56 \text{ pound of HNO}_3/\text{hour fugitive (uncontrolled) emissions}$

$0.05 \text{ pound of HNO}_3/\text{hour stack controlled emissions} + 0.56 \text{ pound of HNO}_3/\text{hour fugitive (uncontrolled) emissions} = 0.61 \text{ pound of HNO}_3/\text{hour total emissions}$

*The 5.6 pounds of HNO₃ per hour was established through the emissions testing conducted on March 1, 2000. Based on the controlled hourly emission rate, the assumed capture efficiency of 90%, and the assumed control efficiency of 99%, it was determined through back calculating that 5.6 pounds of HNO₃ is emitted per hour (prior to control equipment).

If required, HNO₃ emissions testing shall be conducted in accordance with 40 CFR, Part 60, Appendix A, Method 26A.

The permittee demonstrated compliance with this emission limitation through emissions testing conducted on March 1, 2001.

1.d Emission Limitation:

2.41 tons of HNO₃ per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

V. Testing Requirements (continued)

1.e Emission Limitation:

0.05 pound of H₂SO₄ per hour

Applicable Compliance Method:

If testing is not required, the hourly H₂SO₄ emissions limit may be determined by using the following calculations:

The capture efficiency was assumed to be 90% and the control efficiency of the spray chamber scrubber was assumed to be 99%.

$(0.44 \text{ pound of H}_2\text{SO}_4/\text{hour}) \times (0.90) \times (1 - 0.99) = 0.004 \text{ pound of H}_2\text{SO}_4/\text{hour stack controlled emissions}$

$(0.44 \text{ pound of H}_2\text{SO}_4/\text{hour}) \times (0.10) = 0.044 \text{ pound of H}_2\text{SO}_4/\text{hour fugitive (uncontrolled) emissions}$

$0.004 \text{ pound of H}_2\text{SO}_4/\text{hour stack controlled emissions} + 0.044 \text{ pound of H}_2\text{SO}_4/\text{hour fugitive (uncontrolled) emissions} = 0.05 \text{ pound of H}_2\text{SO}_4/\text{hour total emissions}$

*The 0.44 pound of H₂SO₄ per hour was established through the emissions testing conducted on March 1, 2000. Based on the controlled hourly emission rate, the assumed capture efficiency of 90%, and the assumed control efficiency of 99%, it was determined through back calculating that 0.44 pound of H₂SO₄ is emitted per hour (prior to control equipment).

If required, H₂SO₄ emissions testing shall be conducted in accordance with 40 CFR, Part 60, Appendix A, Method 26A.

The permittee demonstrated compliance with this emission limitation through emissions testing conducted on March 1, 2001.

1.f Emission Limitation:

0.22 ton of H₂SO₄ per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

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>
condenser acid cleaning with scrubber		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for emissions unit P033, PTI 01-08382, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: HNO3

TLV (mg/m3): 5.2

Maximum Hourly Emission Rate (lb/hr): 0.61

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 51.79

MAGLC (ug/m3): 123.8

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

2. 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.

3. 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: Condenser Core Builder #4 (P034)

Activity Description: Form condenser fins and remove forming oil by heating

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>
condenser core building line number 4 and oven, with thermal incinerator	OAC rule 3745-31-05(A)(3) (PTI 01-08247)	Volatile organic compound (VOC) emissions shall not exceed 0.68 pound per hour and 2.98 tons per year.
	OAC rule 3745-21-09(U)(2)(e)	See sections A.I.2.a, and A.II.1 and 2 below. The coating usage exemption level specified by this rule is less stringent than the coating usage restriction established by OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The permittee shall employ a thermal incinerator with a minimum control efficiency of 95% to control VOC emissions from the oven whenever the emissions unit is in operation.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,350 degrees Fahrenheit.
2. Condenser core building line oil usage shall not exceed eight (8) gallons per day.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

2. The permittee shall collect and record the following information for each day:
 - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was less than 1,350 degrees Fahrenheit; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall collect and record the following information each day for the condenser core building line:
 - a. the name and identification number of each condenser oil employed;
 - b. the number of gallons of each condenser oil employed;
 - c. the total gallons of all condenser oil employed;
 - d. the VOC content of each condenser oil employed, in pounds per gallon;
 - e. the total hours of operation;
 - f. the total uncontrolled VOC emission rate from the production line, in pounds/hour [i.e., the summation of {(b) x (d)}/(e) for all condenser oils employed, minus 0.6 lb/hour* (from fugitive emissions)];
 - g. the total controlled VOC emission rate from the oven, in pounds/hour [i.e., (f) x (the control efficiency from the most recent emission test that demonstrated the emissions unit was in compliance)]; and
 - h. the total average hourly VOC emission rate, in pounds/ hour [i.e., (g) plus 0.6 lb/hour (from fugitive emissions)].*

* The 0.6 lb/hour VOC fugitive emission rate from the production line was determined by the permittee through mass balance calculations. The total hourly VOC emission rate equals the controlled VOC emissions from the oven, plus the fugitive VOC emissions from the production line.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
2. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the condenser core building line employed more than the maximum daily condenser oil usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the hourly VOC emission limitation.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.
4. The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

thermal incinerator with a minimum control efficiency of 95%

Applicable Compliance Method:

The permittee shall conduct, or have conducted, VOC emission testing for this emissions unit to demonstrate compliance with the minimum control efficiency requirements of section A.I.2.a in accordance with the following requirements:

i. The emission testing shall be conducted within 3 months after issuance of the permit and within 12 months prior to permit expiration.

ii. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

iii. The test(s) shall be conducted while this emissions unit is venting VOC emissions to the thermal incinerator. This emissions unit shall be operated at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Central District Office.

1.b Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

1.c Emission Limitation:

0.68 pound of VOC per hour

Applicable Compliance Method:

Compliance with the pound per hour VOC emission limitation shall be determined by the record keeping specified in section A.III.3.

In addition, compliance with the hourly VOC emission limitation shall be determined in accordance with the emission testing requirement specified in section A.V.1.

V. Testing Requirements (continued)

1.d Emission Limitation:

2.98 tons of VOC per year

Applicable Compliance Method:

Compliance with the annual VOC emission limitation is ensured if compliance is maintained with the hourly VOC emission limitation (the annual VOC emission limitation was determined by multiplying the hourly VOC emission limitation and dividing by 2,000 lbs/ton).

1.e Material Usage Restriction:

Condenser core building line oil usage shall not exceed eight (8) gallons per day.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in section A.III.3 of this permit.

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>
condenser core building line number 4 and oven, with thermal incinerator		

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: ED Cut off process (P035)
Activity Description: Cutting of extruded aluminum tubes for the final product

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>
ED sawing process for the cutting of extruded tubes for copier toner cartridges, with baghouse	OAC rule 3745-31-05(A)(3) (PTI 01-08247)	Particulate emissions (PE) shall not exceed 0.11 pound per hour and 0.48 ton per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-11(B)(1)	See sections A.I.2.a and A.II.1 below. The hourly PE limitation established by this rule is less stringent than that established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.
	OAC rule 3745-17-08(B)	See section A.I.2.c below.

2. Additional Terms and Conditions

- 2.a The facility shall employ a baghouse to control particulate emissions from this emissions unit whenever the emissions unit is in operation.
- 2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.c Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained in the range of one to six inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse, while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis while the emissions unit is in operation.
2. The permittee shall perform weekly inspections, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from this emissions unit. The presence or absence of any visible PE's shall be noted in an operations log. If visible PE's are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the allowable pressure drop range specified in section A.II.1 above, and any actions taken to return the pressure drop to an acceptable level.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

2. The permittee shall submit semiannual written reports that (a) identify all days during which visible PE's were observed from the emissions unit and (b) describe any corrective actions taken to eliminate the visible PE's. These reports shall be submitted to the Ohio EPA, Central District Office by January 31, and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:

0.11 pound of PE per hour

Applicable Compliance Method:

The hourly PE limitation was established by the following calculations:

Aluminum shavings are generated at a rate of 0.000366 lb per tube.

63,000 tubes can be produced by ED per day.

The capture efficiency for the dust collection system was assumed to be 90% and the control efficiency of the baghouse was assumed to be 99%.

Hourly PE emissions:

$(0.000366 \text{ pound of PE/tube}) \times (63,000 \text{ tubes produced/day}) \times (1 - 0.90) = 2.31 \text{ pounds of PE/day fugitive}$

$(0.000366 \text{ pound of PE/tube}) \times (63,000 \text{ tubes produced/day}) \times (0.90) \times (1 - 0.99) = 0.21 \text{ pounds of PE/day controlled}$

$0.21 \text{ pound of PE} + 2.31 \text{ pounds of PE} = 2.52 \text{ pounds of PE/day (sum of controlled and fugitive emissions)}$

$(2.52 \text{ pounds of PE/day}) \times (1 \text{ day/24 hours}) = 0.11 \text{ pound of PE per hour total}$

If required, the permittee shall demonstrate compliance with this emission limitation through emissions tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(10).

1.b Emission Limitation:

0.48 ton of PE per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.c Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(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>
ED sawing process for the cutting of extruded tubes for copier toner cartridges, with baghouse		

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: Zinc Deposition Process (P037)

Activity Description: Zinc deposition process

A. State and Federally 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>
zinc deposition operation for extruded aluminum tubes, with baghouse	OAC rule 3745-31-05(A)(3) (PTI 01-08247)	Particulate emissions (PE) from this emissions unit shall not exceed 0.5 pound per hour and 2.2 tons per year. The requirements of this rule also include compliance with the requirements of 3745-17-07(A)(1).
	OAC rule 3745-17-11(B)(1)	See sections A.I.2.a and b, and A.II.1 below. The hourly PE limitation established by this rule is less stringent than that established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

- The facility shall employ a baghouse to control particulate emissions from this emissions unit whenever the emissions unit is in operation.
- All particulate emissions from this emissions unit shall be vented to the baghouse.

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse, while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis while the emissions unit is in operation.

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

2. The permittee shall perform weekly inspections, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from this emissions unit. The presence or absence of any visible PE's shall be noted in an operations log. If visible PE's are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the allowable pressure drop range specified in section A.II.1 above, and any actions taken to return the pressure drop to an acceptable level.

The deviation reports shall be submitted in accordance with paragraph A.1.c.ii of the General Terms and Conditions of this permit.

2. The permittee shall submit semiannual written reports that (a) identify all days during which visible PE's were observed from the emissions unit and (b) describe any corrective actions taken to eliminate the visible PE's. These reports shall be submitted to the Ohio EPA, Central District Office by January 31, and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

0.5 pound of PE per hour

Applicable Compliance Method:

Compliance with this emissions limitation may be determined by using the following calculations:

Maximum amount of PE created = 0.105 pound of PE per kg of aluminum extruded.

Maximum amount of aluminum extruded per hour = 479 kg per hour.

The capture efficiency of the control system is 100%.

The control efficiency of the baghouse dust collector was assumed to be 99%.

$(479 \text{ kg aluminum/hour}) \times (0.105 \text{ pound of PE/kg aluminum}) \times (1 - 0.99) = 0.5 \text{ pound of PE/hour}$

If required, the permittee shall demonstrate compliance with this emissions limitation through stack testing in accordance with 40 CFR, Part 60, Appendix A, Methods 1-5.

1.b Emission Limitation:

2.2 tons of PE per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

Facility Name: **SHOWA Aluminum Corporation of America**

Facility ID: **01-49-00-0088**

Emissions Unit: **Zinc Deposition Process (P037)**

V. Testing Requirements (continued)

1.c Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR, Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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>
zinc deposition operation for extruded aluminum tubes, with baghouse		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for emissions unit P037, PTI 01-08247 issued on 12/12/2000, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: Zinc oxide (dust)

TLV (mg/m3): 10

Maximum Hourly Emission Rate (lb/hr): 0.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 213.3

MAGLC (ug/m3): 238.1

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

2. 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.

3. 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: Condenser Banding and Bracketing #1 (P038)
Activity Description: Banding and bracketing of condensers using isopropanol

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>
condenser banding and bracketing line number 1 for the assembly of automotive condensers	OAC rule 3745-31-05(A)(3) (PTI 01-08247)	Volatile organic compound (VOC) emissions shall not exceed 0.7 pound per hour and 3.1 tons per year.
	OAC rule 3745-21-09(U)(2)(e)	See sections A.I.2.a and A.II.1 below. The coating usage exemption level specified by this rule is less stringent than coating usage restriction established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The pound per hour VOC emission limitation reflects the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

II. Operational Restrictions

1. Condenser banding and bracketing line lubricant/cleaner usage shall not exceed 2.5 gallons per day.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the condenser banding and bracketing line:
 - a. the name and identification number of the lubricant/cleaner employed;
 - b. the total gallons of each lubricant/cleaner employed;
 - c. the VOC content, in lbs/gallon, of each lubricant/cleaner employed;
 - d. the total gallons of all lubricant/cleaner employed; and
 - e. the total VOC emissions, in pounds [the summation of (b) x (c) for all lubricants/cleaners employed].

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the condenser banding and bracketing line employed more than the maximum daily lubricant/cleaner usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

0.7 pound of VOC per hour

Applicable Compliance Method:

The hourly VOC emission limitation was established by using the following calculations:

Maximum of 2.5 gallons of lubricant/cleaner used per day

Maximum VOC content of the lubricant/cleaner is 6.58 pounds per gallon

$(2.5 \text{ gallons/day}) \times (6.58 \text{ pounds of VOC/gallon}) \times (\text{one day}/24 \text{ hours}) = 0.7 \text{ pound of VOC/hour}$

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

1.b Emission Limitation:

3.1 tons of VOC per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.c Material Usage Restriction:

Condenser banding and bracketing line lubricant/cleaner usage shall not exceed 2.5 gallons per day.

Applicable Compliance Method:

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

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>
condenser banding and bracketing line number 1 for the assembly of automotive condensers		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for emissions unit P038, PTI 01-08247, issued on 12/12/2000, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: Isopropyl alcohol

TLV (mg/m3): 983

Maximum Hourly Emission Rate (lbs/hr): 2.8 (includes fugitive emissions from all four Condenser Banding and Bracketing Lines: P038, P039, P040, and P041)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,083

MAGLC (ug/m3): 23,405

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

2. 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, 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.

3. 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: Condenser Banding and Bracketing #2 (P039)
Activity Description: Banding and bracketing of condensers using isopropanol

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>
condenser banding and bracketing line number 2 for the assembly of automotive condensers	OAC rule 3745-31-05(A)(3) (PTI 01-08247)	Volatile organic compound (VOC) emissions shall not exceed 0.7 pound per hour and 3.1 tons per year.
	OAC rule 3745-21-09(U)(2)(e)	See sections A.I.2.a and A.II.1 below. The coating usage exemption level specified by this rule is less stringent than the coating usage restriction established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The pound per hour VOC emission limitation reflects the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

II. Operational Restrictions

1. Condenser banding and bracketing line lubricant/cleaner usage shall not exceed 2.5 gallons per day.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the condenser banding and bracketing line:
 - a. the name and identification number of each lubricant/cleaner employed;
 - b. the total gallons of each lubricant/cleaner employed;
 - c. the VOC content, in lbs/gallon, of each lubricant/cleaner employed;
 - d. the total gallons of all lubricant/cleaner employed; and
 - e. the total VOC emissions, in pounds [the summation of (b) x (c) for all lubricants/cleaners employed].

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the condenser banding and bracketing line employed more than the maximum daily lubricant/cleaner usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

0.7 pound of VOC per hour

Applicable Compliance Method:

The hourly VOC emission limitation was established by using the following calculations:

Maximum of 2.5 gallons of lubricant/cleaner used per day

Maximum VOC content of the lubricant/cleaner is 6.58 pounds per gallon

$(2.5 \text{ gallons/day}) \times (6.58 \text{ pounds of VOC/gallon}) \times (\text{one day}/24 \text{ hours}) = 0.7 \text{ pound of VOC/hour}$

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

1.b Emission Limitation:

3.1 tons of VOC per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.c Material Usage Restriction:

Condenser banding and bracketing line lubricant/cleaner usage shall not exceed 2.5 gallons per day.

Applicable Compliance Method:

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

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>
condenser banding and bracketing line number 2 for the assembly of automotive condensers		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for emissions unit P039, PTI 01-08247, issued on 12/12/2000, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: Isopropyl alcohol

TLV (mg/m3): 983

Maximum Hourly Emission Rate (lbs/hr): 2.8 (includes fugitive emissions from all four Condenser Banding and Bracketing Lines: P038, P039, P040, and P041)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,083

MAGLC (ug/m3): 23,405

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

2. 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, 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.

3. 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: Condenser Banding and Bracketing #3 (P040)
Activity Description: Banding and bracketing of condensers using isopropanol

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>
condenser banding and bracketing line number 3 for the assembly of automotive condensers	OAC rule 3745-31-05(A)(3) (PTI 01-08247)	Volatile organic compound (VOC) emissions shall not exceed 0.7 pound per hour and 3.1 tons per year.
	OAC rule 3745-21-09(U)(2)(e)	See sections A.I.2.a and A.II.1 below. The coating usage exemption level specified by this rule is less stringent than the coating usage restriction established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The pound per hour VOC emission limitation reflects the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

II. Operational Restrictions

1. Condenser banding and bracketing line lubricant/cleaner usage shall not exceed 2.5 gallons per day.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the condenser banding and bracketing line:
 - a. the name and identification number of each lubricant/cleaner employed;
 - b. the total gallons of each lubricant/cleaner employed;
 - c. the VOC content, in lbs/gallon, of each lubricant/cleaner employed;
 - d. the total gallons of all lubricant/cleaner employed; and
 - e. the total VOC emissions, in pounds [the summation of (b) x (c) for all lubricants/cleaners employed].

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the condenser banding and bracketing line employed more than the maximum daily lubricant/cleaner usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

0.7 pound of VOC per hour

Applicable Compliance Method:

The hourly VOC emission limitation was established by using the following calculations:

Maximum of 2.5 gallons of lubricant/cleaner used per day

Maximum VOC content of the lubricant/cleaner is 6.58 pounds per gallon

$(2.5 \text{ gallons/day}) \times (6.58 \text{ pounds of VOC/gallon}) \times (\text{one day}/24 \text{ hours}) = 0.7 \text{ pound of VOC/hour}$

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

1.b Emission Limitation:

3.1 tons of VOC per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.c Material Usage Restriction:

Condenser banding and bracketing line lubricant/cleaner usage shall not exceed 2.5 gallons per day.

Applicable Compliance Method:

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

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>
condenser banding and bracketing line number 3 for the assembly of automotive condensers		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for emissions unit P040, PTI 01-08247, issued on 12/12/2000, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: Isopropyl alcohol

TLV (mg/m3): 983

Maximum Hourly Emission Rate (lbs/hr): 2.8 (includes fugitive emissions from all four Condenser Banding and Bracketing Lines: P038, P039, P040, and P041)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,083

MAGLC (ug/m3): 23,405

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

2. 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, 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.

3. 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: Condenser Banding and Bracketing #4 (P041)
Activity Description: Banding and bracketing of condensers using isopropanol

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>
condenser banding and bracketing line number 4 for the assembly of automotive condensers	OAC rule 3745-31-05(A)(3) (PTI 01-08247)	Volatile organic compound (VOC) emissions shall not exceed 0.7 pound per hour and 3.1 tons per year.
	OAC rule 3745-21-09(U)(2)(e)	See sections A.I.2.a and A.II.1 below. The coating usage exemption level specified by this rule is less stringent than the coating usage restriction established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a The pound per hour VOC emission limitation reflects the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

II. Operational Restrictions

1. Condenser banding and bracketing line lubricant/cleaner usage shall not exceed 2.5 gallons per day.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the condenser banding and bracketing line:
 - a. the name and identification number of each lubricant/cleaner employed;
 - b. the total gallons of each lubricant/cleaner employed;
 - c. the VOC content, in lbs/gallon, of each lubricant/cleaner employed;
 - d. the total gallons of all lubricant/cleaner employed; and
 - e. the total VOC emissions, in pounds [the summation of (b) x (c) for all lubricants/cleaners employed].

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Central District Office in writing of any daily record showing that the condenser banding and bracketing line employed more than the maximum daily lubricant/cleaner usage limit. The notification shall include a copy of such record and shall be sent to the Ohio EPA, Central District Office within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports that specify the total VOC emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations and material usage restriction of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:

0.7 pound of VOC per hour

Applicable Compliance Method:

The hourly VOC emission limitation was established by using the following calculations:

Maximum of 2.5 gallons of lubricant/cleaner used per day

Maximum VOC content of the lubricant/cleaner is 6.58 pounds per gallon

$(2.5 \text{ gallons/day}) \times (6.58 \text{ pounds of VOC/gallon}) \times (\text{one day}/24 \text{ hours}) = 0.7 \text{ pound of VOC/hour}$

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1-4 and 18, 25 or 25A.

1.b Emission Limitation:

3.1 tons of VOC per year

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly limitation by 8,760 hours/year and then dividing by 2,000 pounds/ton. Compliance with the annual emission limitation may be assumed as long as compliance with the hourly emission limitation is maintained.

1.c Material Usage Restriction:

Condenser banding and bracketing line lubricant/cleaner usage shall not exceed 2.5 gallons per day.

Applicable Compliance Method:

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

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>
condenser banding and bracketing line number 4 for the assembly of automotive condensers		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install for emissions unit P041, PTI 01-08247, issued on 12/12/2000, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. 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: Isopropyl alcohol

TLV (mg/m3): 983

Maximum Hourly Emission Rate (lbs/hr): 2.8 (includes fugitive emissions from all four Condenser Banding and Bracketing Lines: P038, P039, P040, and P041)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1,083

MAGLC (ug/m3): 23,405

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

2. 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, 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.

3. 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

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