



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

11/13/02

**CERTIFIED MAIL**

**RE: Final Title V Chapter 3745-77 permit**

02-43-11-0099

PFF/MFD/STD of Avery Dennison  
Monica M Hammer  
Avery Dennison  
7590 Auburn Road  
Painesville, OH 44077

Dear Monica M Hammer:

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 Northeast District Office.

Very truly yours,

Michael W. Ahern, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: Northeast District Office  
File, DAPC PMU



State of Ohio Environmental Protection Agency

**FINAL TITLE V PERMIT**

Issue Date: <b>11/13/02</b>	Effective Date: <b>12/04/02</b>	Expiration Date: <b>12/04/07</b>
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This document constitutes issuance of a Title V permit for Facility ID: 02-43-11-0099 to:  
 PFF/MFD/STD of Avery Dennison  
 Avery Dennison  
 7590 Auburn Road  
 Painesville, OH 44077

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

K003 (I-1 Coating Line) paper and film coating line	K014 (Building 6 Coating Line) paper and film coating line	material weigh station
K009 (I-2 Coating Line) paper and film coating line	K016 (I-5 Coating Line) paper and film coating line	P071 (Churn Solvent Wash and Recovery System) churn solvent cleaner with a solvent distillation unit
K010 (I-3 Coating Line) paper and film coating line	P065 (205-01 Weigh Station)	

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:

Northeast District Office  
 2110 East Aurora Road  
 Twinsburg, OH 44087  
 (330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY

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. 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. **For emission limitations, operational restrictions, and control device operating parameter limitations:**
    - (a) Written reports of (i) any deviations from federally enforceable 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; (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. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These 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 (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

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

- (b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

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

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) 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 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. 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.
- 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 (i) 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, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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

1. This Title V permit is one of three Title V permits that cover the entire Avery Dennison facility (facility ID 02 43 11 0099) located on Chester Street in Lake County. The three permits are for the following operations:

Avery MFD, Reflective Division, Building #7

Avery PFF, formerly FFD, the P-coaters, Building #3

Avery STD, the I coaters, Building #5 and Building #6 coater

This permit is for Avery STD, the I-coaters in Building #5 and the Building #6 coater.

2. All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR Part 61 and OAC Chapter 3745-20.
3. The permittee operates emission units in a source category that will be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web Coating, 40 CFR Part 63, Subpart JJJJ. U.S. EPA failed to promulgate this standard by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee submitted a Part I application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination.
4. If the final MACT standard is not promulgated by May 15, 2004, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted no later than May 15, 2004 (this date may be changed to May 15, 2003 as a result of a settlement between U.S. EPA and the Sierra Club) , and must contain the following information:
  - a. for a new affected source, the anticipated date of startup of operation;
  - b. the hazardous air pollutants (HAPs)emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
  - c. any existing federal, State, or local limitations or requirements applicable to the affected source;
  - d. for each affected emission point or group of affected emission points, an identification of control technology in place;
  - e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
  - f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.
5. The Part II application for a MACT determination may, but is not required to, contain the following information:
  - a. recommended emission limitations for the affected source and support information. (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
  - b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied; and
  - c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

**A. State and Federally Enforcable Section (continued)**

6. If an applicable MACT standard for the Paper and Other Web Coating Source Category is promulgated before the deadline for the Part II application (currently May 15, 2004), the permittee shall submit the following notifications:
- a. Within 120 days after promulgation of 40 CFR Part 63, Subpart JJJJ, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standard. If the permittee is subject to the final standard, the following information shall also be included in the Initial Notification Report, in accordance with 40 CFR Part 63.9(b)(2):
    - i. the name and mailing address of the permittee;
    - ii. the physical location of the source if it is different from the mailing address;
    - iii. identification of the relevant MACT standard and the source's compliance date;
    - iv. a brief description of the nature, design, size, and method of operation of the source, including the operating design capacity and an identification of each emission point of each HAP; and
    - v. a statement confirming the facility is a major source for HAPs.
  - b. Within 60 days following completion of any required compliance demonstration activity specified in 40 CFR Part 63, Subpart JJJJ, the permittee shall submit a notification of compliance status that contains the following information:
    - i. the methods used to determine compliance;
    - ii. the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;
    - iii. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
    - iv. the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR Part 63, Subpart JJJJ;
    - v. an analysis demonstrating whether the affected source is a major source or an area source;
    - vi. a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and
    - vii. a statement of whether or not the permittee has complied with the requirements of 40 CFR Part 63 Subpart JJJJ.

**B. State Only Enforceable Section**

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

B018 205-01 #4 LP Boiler  
B019 205-02 #4 HP Boiler  
B020 205-03 #5 HP Boiler  
P012 Rubber Grinder  
P027 Rubber Grinder/Talc Collector  
P034 Holt Melt Adhesive Mixer w Bag Collector  
P055 205-1,205-2 Corona Treaters  
P056 205-01 Mixer  
P057 205-02 Mixer  
P058 205-03 Mixer  
P059 205-04 Mixer  
P060 205-01 Mixing Churn  
P061 205-02 Mixing Churn  
P062 205-03 Mixing Churn  
P064 205-02 Versator  
P065 205-01 Weigh Station  
P066 Welding Station  
P067 205-01 Resin Crusher  
T026 205-01 UST (Vaulted)  
T027 205-02 UST (Vaulted)  
T039 AGT TKP-B1  
T040 AGT TKP-C1  
T041 AGT TKP-C2  
T042 AGT TKP-D2  
Z504 205-01 Cleaning Tank  
Z505 205-02 Cleaning Tank  
Z506 205-03 Cleaning Tank  
Z507 204-04 Cleaning Tank  
Z508 205-05 Cleaning Tank  
Z509 205-06 Cleaning Tank  
Z510 205-07 Cleaning Tank  
Z512 205-06 Mixer  
Z513 205-07 Mixer  
Z514 205-08 Mixer  
Z515 205-09 Mixer  
Z516 AGT TKP-B2  
Z517 AGT TKP-B3  
Z518 AGT TKP-A1  
Z519 AGT TKP-A2  
Z520 AGT TKP-A3  
Z521 AGT TKP-A4  
Z522 AGT TKP-A5  
Z523 AGT TKP-C3  
Z524 AGT TKP-D1  
Z525 AGT TKP-D3  
Z526 AGT TKP-D4  
Z527 205-08 Cleaning Tank  
Z528 205-09 Cleaning Tank  
Z529 205-02 Weigh Station  
Z530 205-03 Weigh Station  
Z531 Air Separator Machine I-1, Coater 1  
Z532 Air Separator Machine I-1, Coater 2  
Z533 Air Separator Machine I-2, Coater 1  
Z534 Air Separator Machine I-5, Coater 1  
Z535 Air Separator Machine I-5, Coater 2

Z535 Air Separator Machine I-5, Coater 2

**B. State Only Enforceable Section**

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

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** I-1 Coating Line (K003)  
**Activity Description:** paper and film coating line

#### 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>
I-1 paper and film coating line and a flexographic printing station with thermal oxidizers; Ohio EPA emissions unit number K003 (Building #5)	OAC rule 3745-21-09(B)(6), in lieu of OAC rule 3745-21-09 (F)	81% overall reduction of VOCs by weight (and 90% destruction) for all solvent based coatings (See A.I.2.c.)
	OAC rule 3745-21-09 (F)	For the coatings that are not vented to the thermal oxidizer (non-solvent based coatings), the VOC contents shall not exceed 2.9 pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents. (See A.I.2.d.)
	40 CFR Part 63, Subpart KK (National Emission Standards for the Printing and Publishing Industry)	Exempt by 40 CFR Subpart KK, Section 63.821(a)(2)(ii)(A). See Part A.II.10 of the terms and conditions of this permit.
	OAC rule 3745-21-09(Y)(1)	A capture efficiency that is at least 65%, by weight, and a control efficiency that is at least 90%, by weight, for all the solvent based coatings and inks employed in the printing station (See A.I.2.c.)
		For the coatings and inks that are not vented to the thermal oxidizer (non-solvent based coatings and inks), the VOC contents of the coatings and inks shall not exceed 40% VOC, by volume, of the coating and ink, excluding water and exempt solvents, or 25% VOC, by volume of the volatile matter in the coating and ink.

## 2. Additional Terms and Conditions

- 2.a** All the coaters [I-1, (36,400 acfm); I-2, (27,000 acfm); I-3, (3,600 acfm); I-5 (37,000 acfm); and the Building 6 coater ( 11,200 acfm and formerly the pilot coater-PTI # 02-14471)] at the Specialty Tape Division (STD) facility shall be vented to the thermal oxidizers ( TOX 5-1, TOX 5-2, and TOX 5-3, or equivalent) through a manifolded system of delivery.

The normal operating scenario for this facility during the application of solvent based coatings shall include the use of thermal oxidizers with a combined capacity of 120,000 acfm or more; however, the permittee may employ solvent based coatings when one thermal oxidizer is down provided that the combined acfm for all the coaters in use does not exceed the capacity of the operating thermal oxidizer[s].

If one thermal oxidizer is not operational, the damper monitoring system (DMS) shall divert all air flow to the remaining thermal oxidizer[s]. The permittee shall operate and maintain an emergency vent alarm system which ensures that the capacity of the remaining thermal oxidizer[s] will not be exceeded.

- 2.b** The permanent enclosure serving this emissions unit shall be maintained in such a manner as to meet the criteria established for a permanent total enclosure (PTE) in 40 CFR, Part 51, Appendix M, Reference Method 204 during routine operations when employing solvent based coatings or inks, and shall capture at least 90% of the VOC emissions from this emissions unit when employing solvent based coatings or inks.
- 2.c** A solvent based coating or ink is any coating or ink that must be vented to the thermal oxidizer.
- 2.d** A non-solvent based coating or ink is any coating or ink that is not vented to the thermal oxidizer.

## II. Operational Restrictions

1. The average combustion temperature within each thermal oxidizer, for any 3-hour block of time when any associated emissions unit(s) is (are) in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated this emissions unit was in compliance.
2. Based on the application for this emissions unit, when employing solvent based coatings, this coating line shall be enclosed such that at least 90% of all VOC emissions are captured, contained, and vented to the thermal oxidizers. By not later than March 2003, compliance with the following criteria, as specified in USEPA Method 204, shall be met by the permittee during routine operations when employing solvent based coatings:
  - a. Any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator.
  - b. The total area of all NDOs shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.
  - c. The average facial velocity (FV) of air through all NDOs shall be at least 3,600 meters/hr (200 fpm). The direction of air flow through all NDOs shall be into the enclosure.
  - d. All access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process.
3. When this emissions unit is in operation and employing solvent based coatings, the permanent enclosure shall be maintained under negative pressure at all times during routine operations. Routine operations shall include all operations other than those that require an employee to briefly enter the enclosure for quick cleaning, quality control, or coating change.
4. By not later than March of 2003, the concentrations of VOC emissions measured in accordance with the leak monitoring program for the permanent enclosure shall not exceed 100 ppm, by volume.
5. This emissions unit shall be vented to the thermal oxidizers during all solvent based coating operations and shall not vent through any bypass stack except when employing only non-solvent based coatings.

## II. Operational Restrictions (continued)

6. The permittee shall properly maintain and operate the LEL units in the plenum just prior to the bypass stack, or any other devices or means, to ensure that emissions from solvent based coatings do not go directly to the ambient air. These records shall be made available to the Director or his representative upon request during normal business hours.
7. During the required use of the thermal oxidizers, the permittee shall ensure that any inline bypass that could divert solvent laden air from each coating applicator to the ambient air is closed.

In addition, any device in the bypass which indicates a VOC concentration or temperature change or other parameter in order to alert the permittee of inappropriate bypass use, shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals.

8. The thermal oxidizer control systems shall be designed and operated according to good engineering practices and the manufacturer's specifications.
9. The damper monitoring system (DMS) which automatically sends all air flow to the operational thermal oxidizers when the other(s) are not functional shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals.
10. The permittee shall operate this emissions unit such that during each month the sum of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other materials applied by the printing operation using product and packaging rotogravure work stations or wide web flexographic presses, never exceeds five weight-percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other materials applied at all coating stations in the emissions unit in that month, including all inboard and outboard stations, as described in Section 63.821(A).

In the event that the % of the total mass as described above is in excess of 5%, this coating line shall no longer be exempted from 40 CFR Part 63, Subpart KK.

## 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 temperatures within each thermal oxidizer when the emissions unit is in operation and employing solvent based coatings or inks. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time during which the average combustion temperature within each thermal oxidizer, when the associated emissions unit(s) was (were) in operation and employing solvent based coatings or inks, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.
- b. A log or record of the downtime for the capture (collection) system, control devices, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings or inks.
- c. A record of all periods of time during which solvent based coatings or inks were employed, but the VOC emissions were not vented to at least one of the thermal oxidizers.

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

2. Each day, the permittee shall inspect the permanent enclosure to ensure that the following conditions are being maintained when employing solvent based coatings or inks and immediately after switching from employing non-solvent based coatings or inks to employing solvent based coatings or inks:
  - a. all access doors and windows that are not natural draft openings are closed;
  - b. all velcro closures (if employed) are intact; and
  - c. the direction of air is inward as shown by streamers, smoke tubes, or tracer gases and/or by ensuring that all component curtains curve inward.

By not later than March 2003, the permittee shall also perform weekly velocity or pressure drop measurements for the permanent enclosure to ensure that the average facial velocity through all natural draft openings is maintained at 200 feet per minute or greater.

Records shall be kept of each daily inspection and the weekly velocity or pressure drop measurements, and shall include any corrective actions taken by the permittee.

3. The permittee shall maintain records of all times that the permanent enclosure was not maintained under negative pressure during routine operation of this emissions unit when employing solvent based coatings or inks.
4. The permittee shall collect and record daily the following information for each coating and ink employed in this emissions unit that is not vented to the thermal oxidizer:
  - a. the name and identification number of each coating and ink applied;
  - b. for coatings that are not subject to OAC rule 3745-21-09(Y)(1), the VOC content, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents; and
  - c. for coatings and inks that are subject to OAC rule 3745-21-09(Y)(1), the percent VOC by volume of the coating or ink, excluding water and exempt solvents, and the percent VOC by volume of the volatile matter in the coating or ink.
5. The LEL in the plenum just prior to the bypass stack shall be monitored daily to ensure the use of the thermal oxidizer(s) during the use of solvent based coatings.
6. The permittee shall maintain records of the maintenance and operation of the LEL units or any other devices or means which ensure that emissions from solvent based coatings and inks do not go directly to the ambient air, and these records shall be made available to the Director or his representative during normal business hours.
7. By not later than March of 2003, the permittee shall inspect and monitor at least quarterly with a Photoionization Detector or equivalent device all positive pressure locations between the permanent enclosure of the coater and the thermal oxidizers for unacceptable VOC levels (greater than 100 ppm) and maintain records of the results in accordance with the permittee's 1998 preventive maintenance plan or equivalent. Records shall be maintained of the inspection results and shall include the following:
  - a. line speed;
  - b. fan speed;
  - c. VOC content of the coating applied at the time of monitoring; and
  - d. documentation of any unacceptable level of VOCs.

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

8. The permittee shall maintain records as required in 40 CFR Part 63, Subpart KK, Section 63.829(f).

In order to qualify for the exemption from the MACT requirements as described in 63.821(a)(2)(ii)(A), the permittee shall maintain the following records as required in 40 CFR Part 63, Subpart KK, Section 63.829(f)(1) and (f)(2) for five years and submit them to the Director upon request:

- a. the total mass of all materials, including inks, coatings, varnishes, adhesives, primers, solvents, thinners, and reducers, applied at product and packaging rotogravure stations and wide web flexographic stations in each month, including all inboard and outboard stations; and
  - b. the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers applied at all coating stations in the emissions unit each month;
  - c. the ratio of total mass of all materials applied by the printing operation using product and packaging rotogravure stations and wide web flexographic presses compared to the total mass of all materials used in the emissions unit, i.e.,  $a/b \times 100\%$ ; and
  - d. confirmation that all coaters are stand alone equipment as defined in the rule.
9. Any calculations used to determine compliance shall be maintained at the facility and made available to the Director or his representative, upon request, during normal business hours.
10. The permittee shall employ the plan for preventive maintenance and repair of leaks within the solvent capture and destruction system, as submitted to the Ohio EPA on August 10, 1998, or equivalent.

Equipment subject to the plan shall include all ductwork from the enclosures of the heads of the coaters to the thermal oxidizer, the oven and the thermal oxidizer fan covers.

### IV. Reporting Requirements

1. The permittee shall submit quarterly summary reports that identify the following information:
- a. All 3-hour blocks of time during which the average combustion temperature within each thermal oxidizer does not comply with the temperature limitation specified above.
  - b. All periods of downtime for the capture (collection) system, control device, and monitoring equipment, when the associated coating or printing line was operating and employing solvent based coatings.
  - c. All periods of time when the stack that bypasses the thermal oxidizers is used while employing solvent based coatings in this emissions unit.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

2. The permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any daily record showing that the VOC content of any non-solvent based coating, that is not subject to OAC rule 3745-21-09(Y)(1), exceeded the applicable limitation of 2.9 lbs of VOC per gallon of coating applied, excluding water and exempt solvents.

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

#### **IV. Reporting Requirements (continued)**

3. The permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any daily record showing that the VOC content of any non-solvent based coating or ink, that is subject to OAC rule 3745-21-09(Y)(1), exceeded the applicable limitations of 40% VOC by volume of the coating or ink, excluding water and exempt solvents, and 25% VOC by volume of the volatile matter in the coating or ink.

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

4. By not later than March of 2003, the permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any quarterly record showing any unacceptable level of VOCs (greater than 100 ppm) from the positive pressure locations of the lines between the permanent enclosure and the thermal oxidizers. A copy of the record shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the exceedance occurred.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the 5% limit (the ratio of total mass of all materials applied on the product and packaging rotogravure work stations and wide web flexographic work stations to the total mass of all materials applied in the emissions unit), which exempts this printing operation from the requirements of the MACT standard as described in 40 CFR Part 63, Subpart KK, Section 63.821(a)(2)(ii)(A).

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

6. The permittee shall submit quarterly summaries of the daily inspections and weekly velocity or pressure drop measurements for the permanent total enclosure required under A.III.2. The summaries shall identify the days when the permanent total enclosure was not functioning properly, the cause(s) for the improper operation, and corrective actions taken. The quarterly summaries shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

#### **V. Testing Requirements**

1. USEPA Method 24 or Method 24A shall be used, in accordance with OAC rule 3745-21-04(B)(5), to determine the VOC contents for all coatings and inks. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A (revised as of July 1, 2001), an owner or operator determines that Method 24 or Method 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 and/or Method 24A.

2. Emission Limitation:

For all solvent based coatings that are not subject to OAC rule 3745-21-09(Y)(1), 81% overall VOC reduction by weight (and 90% destruction)

Applicable Compliance Method:

Performance testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration, using the following methods:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204

Performance testing shall be in accordance with OAC rule 3745-21-10(C).

**V. Testing Requirements (continued)**

**3. Emission Limitation:**

For non-solvent based coatings that are not subject to OAC rule 3745-21-09(Y)(1), 2.9 lbs VOC/gallon coating or ink, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance shall be based on the use of USEPA Method 24, and the record keeping in Section A.III.4 of these terms and conditions.

**4. Emission Limitation:**

For non-solvent based coatings and inks that are subject to OAC rule 3745-21-09(Y), 40% VOC by volume of the coating or ink, excluding water and exempt solvents, or 25% VOC by volume of the volatile matter in the coating or ink.

Applicable Compliance Method:

Compliance shall be based on the use of USEPA Method 24, and the record keeping in Section A.III.4 of these terms and conditions.

**5. Emission Limitation:**

For all solvent based coatings and inks that are subject to OAC rule 3745-21-09(Y)(1), 65% capture efficiency and 90% control efficiency.

Applicable Compliance Method:

Performance testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration, using the following methods:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204

Performance testing shall be in accordance with OAC rule 3745-21-10(C).

## **V. Testing Requirements (continued)**

### **6.a Emission testing requirements**

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. The emission testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation and destruction efficiency limitation for VOC of 81% and 90%, respectively, and the 65% capture efficiency limitation for the printing station.
- iii. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

Method 25 of 40 CFR, Part 60 Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm; or

Method 25A of 40 CFR, Part 60 Appendix A, if the VOC concentrations as carbon in the outlet are less than 50ppm; and

Method 204 of 40 CFR Part 51 Appendix M.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- iv. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northeast District Office of the Ohio EPA.

- 6.b** After March 2003, the capture efficiency shall be determined using Methods 204 through Method 204F, as specified 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement.)

The control or destruction efficiency defined as the percent reduction of mass emissions between the inlet and outlet of the control system shall be determined in accordance with the test methods and procedures specified in Ohio Administrative Code 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.

## **V. Testing Requirements (continued)**

- 6.c** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of the Ohio EPA and the local air agency. 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 District Office's refusal to accept the results of the emission test(s).

Personnel from the Northeast District Office of the Ohio EPA 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 Northeast District Office of the Ohio EPA 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 Northeast District Office of the Ohio EPA.

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

## **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>
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**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:** I-2 Coating Line (K009)  
**Activity Description:** paper and film coating line

#### 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>
I-2 paper and film coating line and 2 flexographic printing stations with thermal oxidizers; Ohio EPA emissions unit number K009 (Building #5)	OAC rule 3745-21-09 (B)(6), in lieu of OAC rule 3745-21-09 (F)	81% overall reduction of VOCs by weight ( and 90% destruction) for all solvent based coatings (See A.I.2.c.)
	OAC rule 3745-21-09 (F)	For the coatings that are not vented to the thermal oxidizer (non-solvent based coatings), the VOC contents shall not exceed 2.9 pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents. See A.I.2.d.
	40 CFR Part 63, Subpart KK (National Emission Standards for the Printing and Publishing Industry)	Exempt by 40 CFR Subpart KK, Section 63.821(a)(2)(ii)(A). See Part A.II.10 of the terms and conditions of this permit.
	OAC rule 3745-21-09(Y)(1)	A capture efficiency that is at least 65%, by weight, and a control efficiency that is at least 90%, by weight, for all the solvent based coatings and inks employed in the printing station (See A.I.2.c.)
		For the coatings and inks that are not vented to the thermal oxidizer (non-solvent based coatings and inks), the VOC contents of the coatings and inks shall not exceed 40% VOC, by volume, of the coating and ink, excluding water and exempt solvents, or 25% VOC, by volume of the volatile matter in the coating and ink.

## **2. Additional Terms and Conditions**

- 2.a** All the coaters [I-1, (36,400 acfm); I-2, (27,000 acfm); I-3, (3,600 acfm); I-5 (37,000 acfm); and the Building 6 coater ( 11,200 acfm and formerly the pilot coater-PTI # 02-14471)] at the Specialty Tape Division (STD) facility shall be vented to the thermal oxidizers ( TOX 5-1, TOX 5-2, and TOX 5-3, or equivalent) through a manifolded system of delivery.

The normal operating scenario for this facility during the application of solvent based coatings shall include the use of thermal oxidizers with a combined capacity of 120,000 acfm or more; however, the permittee may employ solvent based coatings when one thermal oxidizer is down provided that the combined acfm for all the coaters in use does not exceed the capacity of the operating thermal oxidizer[s].

If one thermal oxidizer is not operational, the damper monitoring system (DMS) shall divert all air flow to the remaining thermal oxidizer[s]. The permittee shall operate and maintain an emergency vent alarm system which ensures that the capacity of the remaining thermal oxidizer[s] will not be exceeded.

- 2.b** The permanent enclosure serving this emissions unit shall be maintained in such a manner as to meet the criteria established for a permanent total enclosure (PTE) in 40 CFR, Part 51, Appendix M, Reference Method 204 during routine operations when employing solvent based coatings or ink, and shall capture at least 90% of the VOC emissions from this emissions unit when employing solvent based coatings or ink.
- 2.c** A solvent based coating or ink is any coating or ink that must be vented to the thermal oxidizer.
- 2.d** A non-solvent based coating is any coating that is not vented to the thermal oxidizer.

## **II. Operational Restrictions**

- 1.** The average combustion temperature within each thermal oxidizer, for any 3-hour block of time when any associated emissions unit(s) is (are) in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated this emissions unit was in compliance.
- 2.** Based on the application for this emissions unit, when employing solvent based coatings, this coating line shall be enclosed such that at least 90% of all VOC emissions are captured, contained, and vented to the thermal oxidizers. By not later than march 2003, compliance with the following criteria, as specified in USEPA Method 204, shall be met by the permittee during routine operations when employing solvent based coatings:
  - a.** Any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator.
  - b.** The total area of all NDOs shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.
  - c.** The average facial velocity (FV) of air through all NDOs shall be at least 3,600 meters/hr (200 fpm). The direction of air flow through all NDOs shall be into the enclosure.
  - d.** All access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process.
- 3.** When this emissions unit is in operation and employing solvent based coatings, the permanent enclosure shall be maintained under negative pressure at all times during routine operations. Routine operations shall include all operations other than those that require an employee to briefly enter the enclosure for quick cleaning, quality control, or coating change.
- 4.** By not later than December of 2002, the concentrations of VOC emissions measured in accordance with the leak monitoring program for the permanent enclosure shall not exceed 100 ppm, by volume.
- 5.** This emissions unit shall be vented to the thermal oxidizers during all solvent based coating operations and shall not vent through any bypass stack except when employing only non-solvent based coatings.

## II. Operational Restrictions (continued)

6. The permittee shall properly maintain and operate the LEL units in the plenum just prior to the bypass stack, or any other devices or means, to ensure that emissions from solvent based coatings do not go directly to the ambient air. These records shall be made available to the Director or his representative upon request during normal business hours.
7. During the required use of the thermal oxidizers, the permittee shall ensure that any inline bypass that could divert solvent laden air from each coating applicator to the ambient air is closed.

In addition, any device in the bypass which indicates a VOC concentration or temperature change or other parameter in order to alert the permittee of inappropriate bypass use, shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals.

8. The thermal oxidizer control systems shall be designed and operated according to good engineering practices and the manufacturer's specifications.
9. The damper monitoring system (DMS) which automatically sends all air flow to the operational thermal oxidizers when the other(s) are not functional shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals.
10. The permittee shall operate this emissions unit such that during each month the sum of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other materials applied by the printing operation using product and packaging rotogravure work stations or wide web flexographic presses, never exceeds five weight-percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other materials applied at all coating stations in the emissions unit in that month, including all inboard and outboard stations, as described in Section 63.821(A).

In the event that the % of the total mass as described above is in excess of 5%, this coating line shall no longer be exempted from 40 CFR Part 63, Subpart KK.

## 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 temperatures within each thermal oxidizer when the emissions unit is in operation and employing solvent based coatings or inks. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time during which the average combustion temperature within each thermal oxidizer, when the associated emissions unit(s) was (were) in operation and employing solvent based coatings or inks, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.
- b. A log or record of the downtime for the capture (collection) system, control devices, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings or inks.
- c. A record of all periods of time during which solvent based coatings or inks were employed, but the VOC emissions were not vented to at least one of the thermal oxidizers.

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

2. Each day, the permittee shall inspect the permanent enclosure to ensure that the following conditions are being maintained when employing solvent based coatings or inks and immediately after switching from employing non-solvent based coatings or inks to employing solvent based coatings or inks:
  - a. all access doors and windows that are not natural draft openings are closed;
  - b. all velcro closures (if employed) are intact; and
  - c. the direction of air is inward as shown by streamers, smoke tubes, or tracer gases and/or by ensuring that all component curtains curve inward.

By no later than March 2003, the permittee shall also perform weekly velocity or pressure drop measurements for the permanent enclosure to ensure that the average facial velocity through all natural draft openings is maintained at 200 feet per minute or greater.

Records shall be kept of each daily inspection and the weekly velocity or pressure drop measurements, and shall include any corrective actions taken by the permittee.

3. The permittee shall maintain records of all times that the permanent enclosure was not maintained under negative pressure during routine operations of this emissions unit when employing solvent based coatings or inks.
4. The permittee shall collect and record daily the following information for each coating and ink employed in this emissions unit that is not vented to the thermal oxidizer:
  - a. the name and identification number of each coating and ink applied;
  - b. for coatings that are not subject to OAC rule 3745-21-09(Y)(1), the VOC content, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents; and
  - c. for coatings and inks that are subject to OAC rule 3745-21-09(Y)(1), the percent VOC by volume of the coating or ink, excluding water and exempt solvents, and the percent VOC by volume of the volatile matter in the coating or ink.
5. The LEL in the plenum just prior to the bypass stack shall be monitored daily to ensure the use of the thermal oxidizer(s) during the use of solvent based coatings.
6. The permittee shall maintain records of the maintenance and operation of the LEL units or any other devices or means which ensure that emissions from solvent based coatings and inks do not go directly to the ambient air, and these records shall be made available to the Director or his representative during normal business hours.
7. By not later than March of 2003, the permittee shall inspect and monitor at least quarterly with a Photoionization Detector or equivalent device all positive pressure locations between the permanent enclosure of the coater and the thermal oxidizer for unacceptable VOC levels ( greater than 100 ppm) and maintain records of the results in accordance with the permittee's 1998 preventive maintenance plan or equivalent. Records shall be maintained of the inspection results and shall include the following:
  - a. line speed;
  - b. fan speed;
  - c. VOC content of the coating applied at the time of monitoring; and
  - d. documentation of any unacceptable level of VOCs.

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

8. The permittee shall maintain records as required in 40 CFR Part 63, Subpart KK, Section 63.829(f).

In order to qualify for the exemption from the MACT requirements as described in 63.821(a)(2)(ii)(A), the permittee shall maintain the following records as required in 40 CFR Part 63, Subpart KK, Section 63.829(f)(1) and (f)(2) for five years and submit them to the Director upon request:

- a. the total mass of all materials, including inks, coatings, varnishes, adhesives, primers, solvents, thinners, and reducers, applied at product and packaging rotogravure stations and wide web flexographic stations in each month, including all inboard and outboard stations; and
  - b. the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers applied at all coating stations in the emissions unit each month;
  - c. the ratio of total mass of all materials applied by the printing operation using product and packaging rotogravure stations and wide web flexographic presses compared to the total mass of all materials used in the emissions unit, i.e.,  $a/b \times 100\%$ ; and
  - d. confirmation that all coaters are stand alone equipment as defined in the rule.
9. Any calculations used to determine compliance shall be maintained at the facility and made available to the Director or his representative, upon request, during normal business hours.
10. The permittee shall employ the plan for preventive maintenance and repair of leaks within the solvent capture and destruction system, as submitted to the Ohio EPA on August 10, 1998, or equivalent.

Equipment subject to the plan shall include all ductwork from the enclosures of the heads of the coaters to the thermal oxidizer, the oven and the thermal oxidizer fan covers.

### IV. Reporting Requirements

1. The permittee shall submit quarterly summary reports that identify the following information:
- a. All 3-hour blocks of time during which the average combustion temperature within each thermal oxidizer does not comply with the temperature limitation specified above.
  - b. All periods of downtime for the capture (collection) system, control device, and monitoring equipment, when the associated coating or printing line was operating and employing solvent based coatings.
  - c. All periods of time when the stack that bypasses the thermal oxidizers is used while employing solvent based coatings in this emissions unit.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

2. The permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any daily record showing that the VOC content of any non-solvent based coating, that is not subject to OAC rule 3745-21-09(Y)(1), exceeded the applicable limitation of 2.9 lbs of VOC per gallon of coating applied, excluding water and exempt solvents.

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

#### **IV. Reporting Requirements (continued)**

3. The permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any daily record showing that the VOC content of any non-solvent based coating or ink, that is subject to OAC rule 3745-21-09(Y)(1), exceeded the applicable limitations of 40% VOC by volume of the coating or ink, excluding water and exempt solvents, and 25% VOC by volume of the volatile matter in the coating or ink.

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

4. By not later than March of 2003, the permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any quarterly record showing any unacceptable level of VOCs (greater than 100 ppm) from the positive pressure locations of the lines between the permanent enclosure and the thermal oxidizers. A copy of the record shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the exceedance occurred.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the 5% limit (the ratio of total mass of all materials applied on the product and packaging work stations and the wide web flexographic work stations to the total mass of all materials applied on the coating line), which exempts this printing operation from the requirements of the MACT standard as described in 40 CFR Part 63, Subpart KK, Section 63.821(a)(2)(ii)(A).

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

6. The permittee shall submit quarterly summaries of the daily inspections and weekly velocity or pressure drop measurements for the permanent total enclosure required under A.III.2. The summaries shall identify the days when the permanent total enclosure was not functioning properly, the cause(s) for the improper operation, and corrective actions taken. The quarterly summaries shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

#### **V. Testing Requirements**

1. USEPA Method 24 or Method 24A shall be used, in accordance with OAC rule 3745-21-04(B)(5), to determine the VOC contents for all coatings and inks. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A (revised as of July 1, 2001), an owner or operator determines that Method 24 or Method 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 and/or Method 24A.

2. Emission Limitation:

For all solvent based coatings that are not subject to OAC rule 3745-21-09(Y)(1), 81% overall VOC reduction by weight (and 90% destruction)

Applicable Compliance Method:

Performance testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration, using the following methods:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204

Performance testing shall be in accordance with OAC rule 3745-21-10(C).

**V. Testing Requirements (continued)**

**3. Emission Limitation:**

For non-solvent based coatings that are not subject to OAC rule 3745-21-09(Y)(1), 2.9 lbs VOC/gallon coating or ink, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance shall be based on the use of USEPA Method 24, and the record keeping in Section A.III.4 of these terms and conditions.

**4. Emission Limitation:**

For non-solvent based coatings and inks that are subject to OAC rule 3745-21-09(Y), 40% VOC by volume of the coating or ink, excluding water and exempt solvents, or 25% VOC by volume of the volatile matter in the coating or ink.

Applicable Compliance Method:

Compliance shall be based on the use of USEPA Method 24, and the record keeping in Section A.III.4 of these terms and conditions.

**5. Emission Limitation:**

For all solvent based coatings and inks that are subject to OAC rule 3745-21-09(Y)(1), 65% capture efficiency and 90% control efficiency.

Applicable Compliance Method:

Performance testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration, using the following methods:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204

Performance testing shall be in accordance with OAC rule 3745-21-10(C).

## **V. Testing Requirements (continued)**

### **6.a** Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. The emission testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration.

ii. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation and destruction efficiency limitation for VOC of 81% and 90%, respectively, and the 65% capture efficiency limitation for the printing station.

iii. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

Method 25 of 40 CFR, Part 60 Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm; or

Method 25A of 40 CFR, Part 60 Appendix A, if the VOC concentrations as carbon in the outlet are less than 50ppm; and

Method 204 of 40 CFR Part 51 Appendix M.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

iv. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northeast District Office of the Ohio EPA.

**6.b** After March 2003, the capture efficiency shall be determined using Methods 204 through Method 204F, as specified 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement.)

The control or destruction efficiency defined as the percent reduction of mass emissions between the inlet and outlet of the control system shall be determined in accordance with the test methods and procedures specified in Ohio Administrative Code 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.

## **V. Testing Requirements (continued)**

- 6.c** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of the Ohio EPA and the local air agency. 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 District Office's refusal to accept the results of the emission test(s).

Personnel from the Northeast District Office of the Ohio EPA 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 Northeast District Office of the Ohio EPA 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 Northeast District Office of the Ohio EPA.

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

## **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>
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**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:** I-3 Coating Line (K010)  
**Activity Description:** paper and film coating line

#### 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>
I-3 paper and film coating line and 2 flexographic printing stations with thermal oxidizers; Ohio EPA emissions unit number K010 (Building #5)	OAC rule 3745-21-09 (B)(6), in lieu of OAC rule 3745-21-09 (F)	81% overall reduction of VOCs by weight (and 90% destruction) for all solvent based coatings (See A.I.2.c.)
	OAC rule 3745-21-09 (F)	For the coatings that are not vented to the thermal oxidizer (non-solvent based coatings), the VOC contents shall not exceed 2.9 pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents. (See A.I.2.d.)
	40 CFR Part 63, Subpart KK (National Emission Standards for the Printing and Publishing Industry)	Exempt by 40 CFR Subpart KK, Section 63.821(a)(2)(ii)(A). See Part A.II.10 of the terms and conditions of this permit.
	OAC rule 3745-21-09(Y)(1)	A capture efficiency that is at least 65%, by weight, and a control efficiency that is at least 90%, by weight, for all the solvent based coatings and inks employed in the printing stations (See A.I.2.c.)
		For the coatings and inks that are not vented to the thermal oxidizer (non-solvent based coatings and inks), the VOC contents of the coatings and inks shall not exceed 40% VOC, by volume, of the coating and ink, excluding water and exempt solvents, or 25% VOC, by volume of the volatile matter in the coating and ink.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A) (PTI # 02-493)	The requirements established pursuant to OAC rule 3745-31-05(A) are equivalent to the requirements of OAC rule 3745-21-09(B)(6) and OAC rule 3745-21-09(F).

## 2. Additional Terms and Conditions

- 2.a** All the coaters [I-1, (36,400 acfm); I-2, (27,000 acfm); I-3, (3,600 acfm); I-5 (37,000 acfm); and the Building 6 coater ( 11,200 acfm and formerly the pilot coater-PTI # 02-14471)] at the Specialty Tape Division (STD) facility shall be vented to the thermal oxidizers ( TOX 5-1, TOX 5-2, and TOX 5-3, or equivalent) through a manifolded system of delivery.

The normal operating scenario for this facility during the application of solvent based coatings shall include the use of thermal oxidizers with a combined capacity of 120,000 acfm or more; however, the permittee may employ solvent based coatings when one thermal oxidizer is down provided that the combined acfm for all the coaters in use does not exceed the capacity of the operating thermal oxidizer[s].

If one thermal oxidizer is not operational, the damper monitoring system (DMS) shall divert all air flow to the remaining thermal oxidizer[s]. The permittee shall operate and maintain an emergency vent alarm system which ensures that the capacity of the remaining thermal oxidizer[s] will not be exceeded.

- 2.b** The permanent enclosure serving this emissions unit shall be maintained in such a manner as to meet the criteria established for a permanent total enclosure (PTE) in 40 CFR, Part 51, Appendix M, Reference Method 204 during routine operations when employing solvent based coatings or inks, and shall capture at least 90% of the VOC emissions from this emissions unit when employing solvent based coatings or inks.
- 2.c** A solvent based coating or ink is any coating or ink that must be vented to the thermal oxidizer.
- 2.d** A non-solvent based coating or ink is any coating or ink that is not vented to the thermal oxidizer.

## II. Operational Restrictions

1. The average combustion temperature within each thermal oxidizer, for any 3-hour block of time when any associated emissions unit(s) is (are) in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated this emissions unit was in compliance.
2. Based on the application for this emissions unit, when employing solvent based coatings, this coating line shall be enclosed such that at least 90% of all VOC emissions are captured, contained, and vented to the thermal oxidizers. By not later than March 2003, compliance with the following criteria, as specified in USEPA Method 204, shall be met by the permittee during routine operations when employing solvent based coatings:
  - a. Any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator.
  - b. The total area of all NDOs shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.
  - c. The average facial velocity (FV) of air through all NDOs shall be at least 3,600 meters/hr (200 fpm). The direction of air flow through all NDOs shall be into the enclosure.
  - d. All access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process.

## II. Operational Restrictions (continued)

3. When this emissions unit is in operation and employing solvent based coatings, the permanent enclosure shall be maintained under negative pressure at all times during routine operations. Routine operations shall include all operations other than those that require an employee to briefly enter the enclosure for quick cleaning, quality control, or coating change.
4. By not later than March of 2003, the concentrations of VOC emissions measured in accordance with the leak monitoring program for the permanent enclosure shall not exceed 100 ppm, by volume.
5. This emissions unit shall be vented to the thermal oxidizers during all solvent based coating operations and shall not vent through any bypass stack except when employing only non-solvent based coatings.
6. The permittee shall properly maintain and operate the LEL units in the plenum just prior to the bypass stack, or any other devices or means, to ensure that emissions from solvent based coatings do not go directly to the ambient air. These records shall be made available to the Director or his representative upon request during normal business hours.
7. During the required use of the thermal oxidizers, the permittee shall ensure that any inline bypass that could divert solvent laden air from each coating applicator to the ambient air is closed.

In addition, any device in the bypass which indicates a VOC concentration or temperature change or other parameter in order to alert the permittee of inappropriate bypass use, shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals.

8. The thermal oxidizer control systems shall be designed and operated according to good engineering practices and the manufacturer's specifications.
9. The damper monitoring system (DMS) which automatically sends all air flow to the operational thermal oxidizers when the other(s) are not functional shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals.
10. The permittee shall operate this emissions unit such that during each month the sum of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other materials applied by the printing operation using product and packaging rotogravure work stations or wide web flexographic presses, never exceeds five weight-percent of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other materials applied at all coating stations in the emissions unit in that month, including all inboard and outboard stations, as described in Section 63.821(A).

In the event that the % of the total mass as described above is in excess of 5%, this coating line shall no longer be exempted from 40 CFR Part 63, Subpart KK.

### 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 temperatures within each thermal oxidizer when the associated emissions unit(s) is (are) in operation and employing solvent based coatings or inks. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time during which the average combustion temperature within each thermal oxidizer, when the emissions unit(s) was (were) in operation and employing solvent based coatings or inks, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.
  - b. A log or record of the downtime for the capture (collection) system, control devices, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings or inks.
  - c. A record of all periods of time during which solvent based coatings or inks were employed, but the VOC emissions were not vented to at least one of the thermal oxidizers.
2. Each day, the permittee shall inspect the permanent enclosure to ensure that the following conditions are being maintained when employing solvent based coatings or inks and immediately after switching from employing non-solvent based coatings or inks to employing solvent based coatings or inks:
    - a. all access doors and windows that are not natural draft openings are closed;
    - b. all velcro closures (if employed) are intact; and
    - c. the direction of air is inward as shown by streamers, smoke tubes, or tracer gases and/or by ensuring that all component curtains curve inward.

By not later than March 2003, the permittee shall also perform weekly velocity or pressure drop measurements for the permanent enclosure to ensure that the average facial velocity through all natural draft openings is maintained at 200 feet per minute or greater.

Records shall be kept of each daily inspection and the weekly velocity or pressure drop measurements, and shall include any corrective actions taken by the permittee.

3. The permittee shall maintain records of all times that the permanent enclosure was not maintained under negative pressure during routine operations of this emissions unit when employing solvent based coatings or inks.
4. The permittee shall collect and record daily the following information for each coating and ink employed in this emissions unit that is not vented to the thermal oxidizer:
  - a. the name and identification number of each coating and ink applied;
  - b. for coatings that are not subject to OAC rule 3745-21-09(Y)(1), the VOC content, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents; and
  - c. for coatings and inks that are subject to OAC rule 3745-21-09(Y)(1), the percent VOC by volume of the coating or ink, excluding water and exempt solvents, and the percent VOC by volume of the volatile matter in the coating or ink.

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

5. The LEL in the plenum just prior to the bypass stack shall be monitored daily to ensure the use of the thermal oxidizer(s) during the use of solvent based coatings.
6. The permittee shall maintain records of the maintenance and operation of the LEL units or any other devices or means which ensure that emissions from solvent based coatings do not go directly to the ambient air, and these records shall be made available to the Director or his representative during normal business hours.
7. By not later than March of 2003, the permittee shall inspect and monitor at least quarterly with a Photoionization Detector or equivalent device all positive pressure locations between the permanent enclosure of the coater and the thermal oxidizer for unacceptable VOC levels (greater than 100 ppm) and maintain records of the results in accordance with the permittee's 1998 preventive maintenance plan or equivalent. Records shall be maintained of the inspection results and shall include the following:
  - a. line speed;
  - b. fan speed;
  - c. VOC content of the coating applied at the time of monitoring; and
  - d. documentation of any unacceptable level of VOCs.
8. The permittee shall maintain records as required in 40 CFR Part 63, Subpart KK, Section 63.829(f).

In order to qualify for the exemption from the MACT requirements as described in 63.821(a)(2)(ii)(A), the permittee shall maintain the following records as required in 40 CFR Part 63, Subpart KK, Section 63.829(f)(1) and (f)(2) for five years and submit them to the Director upon request:

- a. the total mass of all materials, including inks, coatings, varnishes, adhesives, primers, solvents, thinners, and reducers, applied at product and packaging rotogravure stations and wide web flexographic stations in each month, including all inboard and outboard stations; and
  - b. the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers applied at all coating stations in the emissions unit each month;
  - c. the ratio of total mass of all materials applied by the printing operation using product and packaging rotogravure stations and wide web flexographic presses compared to the total mass of all materials used in the emissions unit, i.e.,  $a/b \times 100\%$ ; and
  - d. confirmation that all coaters are stand alone equipment as defined in the rule.
9. Any calculations used to determine compliance shall be maintained at the facility and made available to the Director or his representative, upon request, during normal business hours.
  10. The permittee shall employ the plan for preventive maintenance and repair of leaks within the solvent capture and destruction system, as submitted to the Ohio EPA on August 10, 1998, or equivalent.

Equipment subject to the plan shall include all ductwork from the enclosures of the heads of the coaters to the thermal oxidizer, the oven and the thermal oxidizer fan covers.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly summary reports which identify the following information:
  - a. All 3-hour blocks of time during that the average combustion temperature within each thermal oxidizer does not comply with the temperature limitation specified above.
  - b. All periods of downtime for the capture (collection) system, control device, and monitoring equipment, when the associated coating or printing line was operating and employing solvent based coatings or inks.
  - c. All periods of time when the stack that bypasses the thermal oxidizers is used while employing solvent based coatings or inks in this emissions unit.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

2. The permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any daily record showing that the VOC content of any non-solvent based coating or ink exceeded the applicable limitation of 2.9 lbs of VOC per gallon of coating applied, excluding water and exempt solvents.

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

3. The permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any daily record showing that the VOC content of any non-solvent based coating or ink, that is subject to OAC rule 3745-21-09(Y)(1), exceeded the applicable limitations of 40% VOC by volume of the coating or ink, excluding water and exempt solvents, and 25% VOC by volume of the volatile matter in the coating or ink.

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

4. By not later than March of 2003, the permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any quarterly record showing any unacceptable level of VOCs (greater than 100 ppm) from the positive pressure locations of the lines between the permanent enclosure and the thermal oxidizers. A copy of the record shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the exceedance occurred.

5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the 5% limit (the ratio of total mass of all materials applied on the product and packaging work stations and the wide web flexographic work stations to the total mass of all materials applied on the coating line), which exempts this printing operation from the requirements of the MACT standard as described in 40 CFR Part 63, Subpart KK, Section 63.821(a)(2)(ii)(A).

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

6. The permittee shall submit quarterly summaries of the daily inspections and weekly velocity or pressure drop measurements for the permanent total enclosure required under A.III.2. The summaries shall identify the days when the permanent total enclosure was not functioning properly, the cause(s) for the improper operation, and corrective actions taken. The quarterly summaries shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## V. Testing Requirements

1. USEPA Method 24 or Method 24A shall be used, in accordance with OAC rule 3745-21-04(B)(5), to determine the VOC contents for all coatings and inks. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A (revised as of July 1, 2001), an owner or operator determines that Method 24 or Method 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 and/or Method 24A.

2. Emission Limitation:

For all solvent based coatings that are not subject to OAC rule 3745-21-09(Y)(1), 81% overall VOC reduction by weight (and 90% destruction)

Applicable Compliance Method:

Performance testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration, using the following methods:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204

Performance testing shall be in accordance with OAC rule 3745-21-10(C).

3. Emission Limitation:

For non-solvent based coatings that are not subject to OAC rule 3745-21-09(Y)(1), 2.9 lbs VOC/gallon coating or ink, as applied, excluding water and exempt solvents.

Applicable Compliance Method:

Compliance shall be based on the use of USEPA Method 24, and the record keeping in Section A.III.4 of these terms and conditions.

4. Emission Limitation:

For non-solvent based coatings and inks that are subject to OAC rule 3745-21-09(Y), 40% VOC by volume of the coating or ink, excluding water and exempt solvents, or 25% VOC by volume of the volatile matter in the coating or ink.

Applicable Compliance Method:

Compliance shall be based on the use of USEPA Method 24, and the record keeping in Section A.III.4 of these terms and conditions.

5. Emission Limitation:

For all solvent based coatings and inks that are subject to OAC rule 3745-21-09(Y)(1), 65% capture efficiency and 90% control efficiency.

Applicable Compliance Method:

Performance testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration, using the following methods:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204

Performance testing shall be in accordance with OAC rule 3745-21-10(C).

## **V. Testing Requirements (continued)**

### **6.a Emission testing requirements**

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. Emission testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration.

ii. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation and destruction efficiency limitation for VOC of 81% and 90%, respectively, and the 65% capture efficiency limitation for the printing stations.

iii. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

Method 25 of 40 CFR, Part 60 Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm; or

Method 25A of 40 CFR, Part 60 Appendix A, if the VOC concentrations as carbon in the outlet are less than 50ppm; and

Method 204 of 40 CFR Part 51 Appendix M.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

iv. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northeast District Office of the Ohio EPA.

**6.b** After March 2003, the capture efficiency shall be determined using Methods 204 through Method 204F, as specified 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement.)

The control or destruction efficiency defined as the percent reduction of mass emissions between the inlet and outlet of the control system shall be determined in accordance with the test methods and procedures specified in Ohio Administrative Code 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.

## **V. Testing Requirements (continued)**

- 6.c** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of the Ohio EPA and the local air agency. 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 District Office's refusal to accept the results of the emission test(s).

Personnel from the Northeast District Office of the Ohio EPA 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 Northeast District Office of the Ohio EPA 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 Northeast District Office of the Ohio EPA.

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

## **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>
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**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:** Building 6 Coating Line (K014)

**Activity Description:** paper and film coating line

#### 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>
Building #6 coating line for adhesive and hot melt products with thermal oxidizer(s); Ohio EPA emissions unit number K014 (Building #6)	OAC rule 3745-31-05(A)(2) and (A)(3) PTI # 02-4109	98.5 % overall reduction of VOC by weight (100 % capture efficiency and 98.5 % destruction efficiency) for all solvent based coatings;  11.44 pounds of VOC per hour as a daily average, including cleanup, and 6.72 tons of VOC per rolling 365-day period, including cleanup;  The BAT determination also includes compliance with OAC rule 3745-21-09(F), 40 CFR Part 60 Subpart RR, 40 CFR Part 63 Subpart KK and 40 CFR Part 63 Subpart JJJJ.
	OAC rule 3745-21-09(B) in lieu of OAC rule 3745-21-09(F)	The control efficiency limitation of 81% overall reduction of VOCs by weight (and 90% destruction) for all solvent based coatings (see A.I.2.c) specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-21-09(F)	The VOC content limitation of 2.9 pounds VOC per gallon of coating, excluding water and exempt solvents, for all non-solvent based coatings (see A.I.2.d) specified by this rule is less stringent than the VOC content limitation pursuant to 40 CFR Part 60 Subpart RR.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	40 CFR Part 60 Subpart RR	<p>The overall VOC emission reduction control efficiency emission limitation specified by this rule is less stringent than the overall VOC emission reduction control efficiency limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>The VOC content of each coating that is not vented to a thermal oxidizer shall not exceed 0.20 kg /kg of coating solids applied.</p>

## 2. Additional Terms and Conditions

- 2.a** All the coaters [I-1, (36,400 acfm); I-2, (27,000 acfm); I-3, (3,600 acfm); I-5 (37,000 acfm); and the Building 6 coater ( 11,200 acfm and formerly the pilot coater-PTI # 02-14471)] at the Specialty Tape Division (STD) facility shall be vented to the thermal oxidizers ( TOX 5-1, TOX 5-2, and TOX 5-3, or equivalent) through a manifolded system of delivery.

The normal operating scenario for this facility during the application of solvent based coatings shall include the use of thermal oxidizers with a combined capacity of 120,000 acfm or more; however, the permittee may employ solvent based coatings when one thermal oxidizer is down provided that the combined acfm for all the coaters in use does not exceed the capacity of the operating thermal oxidizer[s].

If one thermal oxidizer is not operational, the damper monitoring system (DMS) shall divert all air flow to the remaining thermal oxidizer[s]. The permittee shall operate and maintain an emergency vent alarm system which ensures that the capacity of the remaining thermal oxidizer[s] will not be exceeded.

- 2.b** The permittee shall maintain a permanent total enclosure (PTE) that complies with the requirements in 40 CFR, Part 51, Appendix M, Reference Method 204, to capture all the VOC emissions from this emissions unit when employing solvent based coatings.
- 2.c** A solvent based coating is any coating that must be vented to the thermal oxidizer.
- 2.d** A non-solvent based coating is any coating that is not vented to the thermal oxidizer.

## II. Operational Restrictions

1. The average combustion temperature within each thermal oxidizer, for any 3-hour block of time when any emissions unit(s) is (are) in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated this emissions unit was in compliance.

## II. Operational Restrictions (continued)

2. This emissions unit shall be totally enclosed such that all VOC emissions are captured, contained, and when employing solvent based coatings, vented to the thermal oxidizers. Compliance with the following criteria, as specified in USEPA Method 204, shall be met by the permittee when employing solvent based coatings:
  - a. Any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator.
  - b. The total area of all NDOs shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.
  - c. The average facial velocity (FV) of air through all NDOs shall be at least 3,600 meters/hr (200 fpm). The direction of air flow through all NDOs shall be into the enclosure.
  - d. All access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process.
3. This emissions unit shall be vented to the thermal oxidizers during all solvent based coating operations.
4. The permittee shall properly maintain and operate the LEL units in the plenum just prior to the bypass stack and any other devices or means, to ensure that emissions from solvent based coatings do not go directly to the ambient air. These records shall be made available to the Director or his representative upon request during normal business hours.
5. During the required use of the thermal oxidizers, the permittee shall ensure that any inline bypass that could divert solvent laden air from each coating applicator to the ambient air is closed.

In addition, any device in the bypass which indicates a VOC concentration or temperature change or other parameter in order to alert the permittee of inappropriate bypass use, shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals.

6. The thermal oxidizer control systems shall be designed and operated according to good engineering practices and the manufacturer's recommendations and specifications.
7. The damper monitoring system and the emergency alarm system which diverts all air flow to the operational thermal oxidizer(s) when the other is not functional, and alerts the permittee if the capacity of the oxidizers is exceeded, respectively, shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals.
8. When this emissions unit is in operation and employing solvent based coatings, the PTE shall be maintained under negative pressure at a minimum differential pressure, in inches of water as a three-hour average, that is equal to or greater than the differential pressure that was established at the time of the last emissions test that demonstrated compliance with the criteria for the permanent total enclosure. The corresponding differential pressure shall be determined for the PTE when compliance with the 200 fpm facial velocity is demonstrated.
9. The concentrations of VOC emissions determined in accordance with the leak monitoring program for the permanent total enclosure shall not exceed 100 ppm, by volume.
10. The permittee shall limit coating usage so that the amount of VOC applied, plus the amount of VOC from cleanup materials, is no more than 448 tons per rolling 365-day period.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperatures within each thermal oxidizer when the associated emissions unit(s) is in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time during which the average combustion temperature within each thermal oxidizer, when the emissions unit was in operation and employing solvent based coatings, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.
- b. A log or record of the downtime for the capture (collection) system(s), control devices, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings.
- c. A record of all periods of time during which solvent based coatings were employed, but the VOC emissions were not vented to at least one of the thermal oxidizers.

2. Within 18 months after the issuance of this permit, the permittee shall install, and thereafter operate and maintain, a continuous pressure drop monitor and recorder that continuously measures and records the pressure drop across the permanent total enclosure when the permittee is employing solvent based coatings in this emissions unit. Units shall be in inches of water. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The pressure drop 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 permittee shall collect and record the following information each day:

- a. all three-hour blocks of time when, the thermal oxidizer(s) is (are) is in operation and employing solvent based coatings, during which the permanent total enclosure was not maintained at or above the minimum pressure differential, in inches of water as a three-hour average, specified in A.II.8; and
- b. a log or record of downtime for the capture (collection) system when the emissions unit was in operation .

3. Prior to the installation of the monitoring and recording equipment for pressure drop, each day the permittee shall inspect the permanent total enclosure to ensure that the following conditions are being maintained:
  - a. all access doors and windows that are not natural draft openings are closed;
  - b. all velcro closures (if employed) are intact; and
  - c. the direction of air is inward as shown by streamers, smoke tubes, or tracer gases and/or by ensuring that all component curtains curve inward.

The permittee shall also perform weekly velocity or pressure drop measurements for the permanent total enclosure to ensure that the average facial velocity through all natural draft openings is maintained at 200 feet per minute or greater.

Records shall be kept of each daily inspection and the weekly velocity or pressure drop measurements, and shall include any corrective actions taken by the permittee.

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

4. The permittee shall collect and record the following information daily for all the coatings employed in this emissions unit that are not vented to the thermal oxidizer(s):
  - a. the name and identification number of each coating employed;
  - b. the VOC content of each coating, in kg/kg of coating solids, as applied, and in lbs per gallon excluding water and exempt solvents;
  - c. the number of gallons of each coating employed, excluding water and exempt solvents; and
  - d. the total VOC emissions from all the coatings employed, in pounds and tons.
  
5. The permittee shall collect and record the following information daily for all solvent based coatings employed in this emissions unit:
  - a. the name and identification number of each coating employed;
  - b. the VOC content of each coating, as applied, in pounds per gallon, excluding water and exempt solvents;
  - c. the number of gallons of each coating employed, excluding water and exempt solvents;
  - d. the total uncontrolled VOC emissions from all the solvent based coatings employed, in pounds and tons; and
  - e. the calculated, controlled VOC emission rate for all the solvent based coatings, in pounds and tons (the controlled VOC emission rate for the solvent based coatings shall be calculated using the overall control efficiency for the control equipment as determined during the most recent compliance test that demonstrated that the emissions unit was in compliance).
  
6. The permittee shall collect and record the following information daily for all cleanup materials:
  - a. the name and identification of each cleanup material employed;
  - b. the number of gallons of each cleanup material employed;
  - c. the VOC content of each cleanup material, in pounds per gallon; and
  - d. the total VOC emissions from all cleanup materials employed in pounds and tons.

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

7. The permittee shall record the following information daily:
  - a. the total VOC emissions from all coatings and cleanup materials, i.e., the sum of the values from A.III.4.d, A.III.5.e, and A.III.6.d, in pounds;
  - b. the total operating hours for the emissions unit;
  - c. the average hourly emission rate, in pounds per hour ( $a/b$ );
  - d. the rolling, 365-day summation of the VOC emissions from all coatings and cleanup materials, in tons;
  - e. the total VOC usage rate (total uncontrolled VOC emissions) in this coating line, i.e., the sum of the values from A.III.4.d, A.III.5.d, and A.III.6.d, in tons; and
  - f. the rolling, 365-day summation of the total VOC usage rate, in tons.
8. The LEL in the plenum just prior to the bypass stack shall be monitored daily to ensure the use of the thermal oxidizer(s) during the use of solvent based coatings in this emissions unit.
9. The permittee shall maintain records of the maintenance and operation of the LEL units or any other devices or means which ensure that emissions from solvent based coatings do not go directly to the ambient air, and these records shall be made available to the Director or his representative during normal business hours.
10. The permittee shall inspect and monitor quarterly with a Photoionization Detector or equivalent device all positive pressure locations between the permanent enclosure of the coater and the thermal oxidizer for unacceptable VOC levels (greater than 100 ppm) and maintain records of the results in accordance with the permittee's 1998 preventive maintenance plan or equivalent. Records shall be maintained of the inspection results and shall include the following:
  - a. line speed;
  - b. fan speed;
  - c. VOC content of the coating applied at the time of monitoring; and
  - d. documentation of any unacceptable level of VOCs.
11. Any calculations used to determine compliance shall be maintained at the facility and made available to the Director or his representative, upon request, during normal business hours.
12. The permittee shall employ the plan for preventive maintenance and repair of leaks within the solvent capture and destruction system, as submitted to the Ohio EPA on August 10, 1998, or equivalent.

Equipment subject to the plan shall include all ductwork from the enclosures of the heads of the coaters to the thermal oxidizer, the oven and the thermal oxidizer fan covers.

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly summary reports that identify the following information:
  - a. All 3-hour blocks of time during which the average combustion temperature within each thermal oxidizer did not comply with the temperature limitation specified above.
  - b. All periods of downtime for the capture (collection) system, control device, and monitoring equipment, when the associated coating or printing line was operating and employing solvent based coatings.
  - c. All periods of time when the stack that bypasses the thermal oxidizers was used while employing solvent based coatings in this emissions unit.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

2. The permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any daily record showing that the VOC content of any non-solvent based coating exceeded the applicable limitation of 0.20 kg per kg of coating solids as applied.

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

3. Beginning with the first calendar quarter following the installation of the pressure drop monitoring equipment for the PTE, the permittee shall submit quarterly deviation (excursion) reports that identify all three-hour blocks of time, when the emissions unit was in solvent based operation, during which the permanent total enclosure was not maintained at the minimum pressure differential required in A.II.8.
4. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 365-day emission limitation for VOC of 6.72 tons.
6. The permittee shall submit deviation (excursion) reports that identify all exceedances of the average hourly emission limitation for VOC of 11.44 lbs per hour.
7. The permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any quarterly record showing any unacceptable level of VOCs (greater than 100 ppm) from the positive pressure locations of the lines between the permanent enclosure and the thermal oxidizers. A copy of the record shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the exceedance occurred.
8. The permittee shall submit quarterly summaries of the daily inspections and weekly velocity or pressure drop measurements for the permanent total enclosure required under A.III.3. The summaries shall identify the days when the permanent total enclosure was not functioning properly, the cause(s) for the improper operation, and corrective actions taken. The quarterly summaries shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

#### **V. Testing Requirements**

1. USEPA Method 24 shall be used, in accordance with OAC rule 3745-21-04(B)(5), to determine the VOC contents for all coatings. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A (revised as of July 1, 2001), 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. Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the cleanup materials.

**V. Testing Requirements (continued)**

**2. Emission Limitation:**

98.5% overall VOC reduction by weight (100% capture efficiency and 98.5% destruction efficiency) for all coatings except non-solvent based coatings.

Applicable Compliance Method:

Performance testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration, using the following methods:

40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204.

Performance testing shall be in accordance with OAC rule 3745-21-10(C).

**3. Emission Limitation**

11.44 lbs VOC per hour on a daily average basis, including cleanup

Applicable Compliance Method :

Compliance shall be based on the record keeping requirements in Section A.III. 7 of these terms and conditions.

**4. Emission Limitation:**

0.20 kilogram of VOC per kilogram of solids, as applied, when employing non-solvent based coatings

Applicable Compliance Method:

Compliance shall be based upon the use of Method 24 , or any alternative compliance test method approved by the USEPA for determining the VOC content of each coating, and on the record keeping in Section A.III.4.

**5. Emission Limitation:**

6.72 tons VOC per year as a rolling 365-day basis.

Applicable Compliance Method:

Compliance shall be determined by the record keeping required in Section A.III.7 of these terms and conditions.

## **V. Testing Requirements (continued)**

### **6.a** Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. Emission testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the overall reduction efficiency limitation and capture efficiency limitation for VOC of 98.5% and 100%, respectively.
- iii. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

Method 25 of 40 CFR, Part 60 Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm; or

Method 25A of 40 CFR, Part 60 Appendix A, if the VOC concentrations as carbon in the outlet are less than 50ppm; and

Method 204 of 40 CFR Part 51 Appendix M.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- iv. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northeast District Office of the Ohio EPA.

### **6.b** The capture efficiency shall be determined using Methods 204 through Method 204F, as specified 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement.)

The control or destruction efficiency defined as the percent reduction of mass emissions between the inlet and outlet of the control system shall be determined in accordance with the test methods and procedures specified in Ohio Administrative Code 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.

## **V. Testing Requirements (continued)**

- 6.c** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of the Ohio EPA and the local air agency. 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 Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Northeast District Office of the Ohio EPA and local air agency 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 Northeast District Office of the Ohio EPA 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 from the Northeast District Office of the Ohio EPA.

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

## **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>
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**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:** I-5 Coating Line (K016)  
**Activity Description:** paper and film coating line

#### 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>
I-5 paper and film coating line with thermal oxidizers; Ohio EPA emissions unit number K016 (Building #5)	OAC rule 3745-21-09 (F)	The VOC content limitation of 2.9 pounds VOC per gallon of coating, excluding water and exempt solvents, for all non-solvent based coatings (see A.1.2.d) specified by this rule is less stringent than the VOC content limitation pursuant to 40 CFR Part 60 Subpart RR.
	40 CFR Part 60, Subpart RR	For solvent based coatings, the control efficiency limitations specified by this rule are less stringent than the control efficiency limitations established pursuant to OAC rule 3745-31-05(A)(3).
		0.20 kg VOC/kg of coating solids applied, for coatings that are not vented to the thermal oxidizer(s).

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05 PTI #02-7206 (synthetic minor)	<p>12.31 pounds of VOC per hour from the coating line, including cleanup, as a daily average;</p> <p>39 tons VOC per rolling 365-day period, from the coating line, including cleanup; and</p> <p>98.5% overall VOC reduction by weight (i.e., 100% capture efficiency and 98.5% destruction efficiency) for all solvent based coatings. See A.1.2.c.</p> <p>The requirements of this rule also include compliance with the VOC content limitations specified in 40 CFR, Part 60 Subpart RR and OAC rule 3745-21-09.</p>

**2. Additional Terms and Conditions**

**2.a** All the coaters [I-1, (36,400 acfm); I-2, (27,000 acfm); I-3, (3,600 acfm); I-5 (37,000 acfm); and the Building 6 coater ( 11,200 acfm and formerly the pilot coater-PTI # 02-14471)] at the Specialty Tape Division (STD) facility shall be vented to the thermal oxidizers ( TOX 5-1, TOX 5-2, and TOX 5-3, or equivalent) through a manifolded system of delivery.

The normal operating scenario for this facility during the application of solvent based coatings shall include the use of thermal oxidizers with a combined capacity of 120,000 acfm or more; however, the permittee may employ solvent based coatings when one thermal oxidizer is down provided that the combined acfm for all the coaters in use does not exceed the capacity of the operating thermal oxidizer[s].

If one thermal oxidizer is not operational, the damper monitoring system (DMS) shall divert all air flow to the remaining thermal oxidizer[s]. The permittee shall operate and maintain an emergency vent alarm system which ensures that the capacity of the remaining thermal oxidizer[s] will not be exceeded.

**2.b** The permanent total enclosure (PTE) serving this emissions unit shall be maintained in such a manner as to meet the criteria established for a permanent total enclosure in 40 CFR, Part 51, Appendix M, Reference Method 204, and capture all of the VOC emissions from this emissions unit when employing solvent based coatings.

**2.c** A solvent based coating is any coating that must be vented to the thermal oxidizer.

**2.d** A non-solvent based coating is any coating that is not vented to the thermal oxidizer.

**II. Operational Restrictions**

1. The average combustion temperature within each thermal oxidizer, for any 3-hour block of time when any associated emissions unit(s) is (are) in operation and employing solvent based coatings, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated this emissions unit was in compliance.

## II. Operational Restrictions (continued)

2. This emissions unit shall be enclosed such that all VOC emissions are captured, contained, and when employing solvent based coatings, vented to the thermal oxidizers. Compliance with the following criteria, as specified in USEPA Method 204, shall be met by the permittee when employing solvent based coatings:
  - a. Any natural draft opening (NDO) shall be at least four equivalent opening diameters from each VOC emitting point unless otherwise specified by the Administrator.
  - b. The total area of all NDOs shall not exceed 5 percent of the surface area of the enclosure's four walls, floor, and ceiling.
  - c. The average facial velocity (FV) of air through all NDOs shall be at least 3,600 meters/hr (200 fpm). The direction of air flow through all NDOs shall be into the enclosure.
  - d. All access doors and windows whose areas are not included in section (b) and are not included in the calculation in section (c) shall be closed during routine operation of the process.
3. This emissions unit shall be vented to the thermal oxidizers during all solvent based coating operations except when employing only coatings that comply with the VOC content limits contained in OAC rule 3745-21-09(F) and 40 CFR Part 60 Subpart RR.
4. The permittee shall properly maintain and operate the LEL units in the plenum just prior to the bypass stack, and any other devices or means, to ensure that emissions from solvent based coatings do not go directly to the ambient air. These records shall be made available to the Director or his representative upon request during normal business hours.
5. During the required use of the thermal oxidizers, the permittee shall ensure that any inline bypass that could divert solvent laden air from each coating applicator to the ambient air is closed.

In addition, any device in the bypass which indicates a VOC concentration or temperature change or other parameter in order to alert the permittee of inappropriate bypass use, shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals.
6. The thermal oxidizer control systems shall be designed and operated according to good engineering practices and the manufacturer's specifications.
7. The damper monitoring system (DMS) which automatically sends all air flow to the operational thermal oxidizers when the other(s) are not functional shall be operated and maintained according to the manufacturer's recommendations, instructions and operating manuals.
8. When this emissions unit is in operation and employing solvent based coatings, the PTE shall be maintained under negative pressure at a minimum differential pressure, in inches of water as a three-hour average, that is equal to or greater than the differential pressure that was established at the time of the last emissions test that demonstrated compliance with the criteria for the permanent total enclosure. The corresponding differential pressure shall be determined for the PTE when compliance with the 200 fpm facial velocity is demonstrated.
9. The permittee shall limit coating usage so that the amount of VOC applied is no more than 2,600 tons per rolling 365-day period.
10. The concentrations of VOC emissions in accordance with the leak monitoring program for the permanent total enclosure shall not exceed 100 ppm, by volume.

### 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 temperatures within each thermal oxidizer when the associated emissions unit(s) is (are) in operation and employing solvent based coatings. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time during which the average combustion temperature within each thermal oxidizer, when the emissions unit(s) was (were) in operation and employing solvent based coatings, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.
  - b. A log or record of the downtime for the capture (collection) system, control devices, and monitoring equipment, when the associated emissions unit was in operation and employing solvent based coatings.
  - c. A record of all periods of time during which solvent based coatings were employed, but the VOC emissions were not vented to at least one of the thermal oxidizers.
2. Within 18 months after the issuance of this permit, the permittee shall install, and thereafter operate and maintain, a continuous pressure drop monitor and recorder which measures and records the pressure drop across the permanent total enclosure when the permittee is employing solvent based coatings in this emissions unit. Units shall be in inches of water. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The pressure drop 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 permittee shall collect and record the following information each day:

- a. all three hour blocks of time when, the thermal oxidizer(s) is (are) is in operation, during which the permanent total enclosure was not maintained at or above the minimum pressure differential, in inches of water as a three-hour average, specified in A.II.8; and
- b. a log or record of downtime for the capture (collection) system when the emissions unit was in operation.

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

3. Prior to the installation of the monitoring and recording equipment for pressure drop, each day the permittee shall inspect the permanent total enclosure to ensure that the following conditions are being maintained when employing solvent based coatings and immediately after switching from employing non-solvent based coatings to employing solvent based coatings:
  - a. all access doors and windows that are not natural draft openings are closed;
  - b. all velcro closures (if employed) are intact; and
  - c. the direction of air is inward as shown by streamers, smoke tubes, or tracer gases and/or by ensuring that all component curtains curve inward.

The permittee shall also perform weekly velocity or pressure drop measurements for the permanent total enclosure to ensure that the average facial velocity through all natural draft openings is maintained at 200 feet per minute or greater.

Records shall be kept of each daily inspection and the weekly velocity or pressure drop measurements, and shall include any corrective actions taken by the permittee.

4. The permittee shall collect and record the following information daily for all the coatings employed in this emissions unit that are not vented to the thermal oxidizer(s):
  - a. the name and identification number of each coating employed;
  - b. the VOC content of each coating, in kg/kg of coating solids, as applied, and in lbs per gallon excluding water and exempt solvents;
  - c. the number of gallons of each coating employed, excluding water and exempt solvents; and
  - d. the total VOC emissions from all the coatings employed, in pounds and tons.
5. The permittee shall collect and record the following information daily for all solvent based coatings employed in this emissions unit:
  - a. the name and identification number of each coating employed;
  - b. the VOC content of each coating, as applied, in pounds per gallon, excluding water and exempt solvents;
  - c. the number of gallons of each coating employed, excluding water and exempt solvents;
  - d. the total uncontrolled VOC emissions from all the solvent based coatings employed, in pounds and tons; and
  - e. the calculated, controlled VOC emission rate for all the solvent based coatings, in pounds and tons (the controlled VOC emission rate for the solvent based coatings shall be calculated using the overall efficiency for the control equipment as determined during the most recent compliance test that demonstrated that the emissions unit was in compliance).

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

6. The permittee shall collect and record the following information daily for all cleanup materials:
  - a. the name and identification of each cleanup material employed;
  - b. the number of gallons of each cleanup material employed;
  - c. the VOC content of each cleanup material, in pounds per gallon; and
  - d. the total VOC emissions from all cleanup materials employed, in pounds and tons.
  
7. The permittee shall record the following information daily:
  - a. the total VOC emissions from all coatings and cleanup materials, i.e., the sum of the values from A.III.4.d, A.III.5.e, and A.III.6.d, in pounds;
  - b. the total operating hours for the emissions unit;
  - c. the average hourly emission rate, in pounds per hour (a/b);
  - d. the rolling, 365-day summation of VOC emissions from all coatings and cleanup materials, in tons;
  - e. the total VOC usage rate (total uncontrolled VOC emissions) in this coating line, i.e., the sum of the values from A.III.4.d, A.III.5.d, and A.III.6.d, in tons; and
  - f. the rolling, 365-day summation of the total VOC usage rate, in tons.
  
8. The LEL in the plenum just prior to the bypass stack shall be monitored daily to ensure the use of the thermal oxidizer(s) during the use of solvent based coatings.
  
9. The permittee shall maintain records of the maintenance and operation of the LEL units or any other devices or means which ensure that emissions from solvent based coatings do not go directly to the ambient air, and these records shall be made available to the Director or his representative during normal business hours.
  
10. The permittee shall inspect and monitor quarterly with a Photoionization Detector or equivalent device all positive pressure locations between the permanent enclosure of the coater and the thermal oxidizer for unacceptable VOC levels ( greater than 100 ppm) and maintain records of the results in accordance with the permittee's 1998 preventive maintenance plan or equivalent. Records shall be maintained of the inspection results and shall include the following:
  - a. line speed;
  - b. fan speed;
  - c. VOC content of the coating applied at the time of monitoring; and
  - d. documentation of any unacceptable level of VOCs.
  
11. Any calculations used to determine compliance shall be maintained at the facility and made available to the Director or his representative, upon request, during normal business hours.
  
12. The permittee shall employ the plan for preventive maintenance and repair of leaks within the solvent capture and destruction system, as submitted to the Ohio EPA on August 10, 1998, or equivalent.

Equipment subject to the plan shall include all ductwork from the enclosures of the heads of the coaters to the thermal oxidizer, the oven and the thermal oxidizer fan covers.

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly summary reports that identify the following information:
  - a. All 3-hour blocks of time during which the average combustion temperature within each thermal oxidizer did not comply with the temperature limitation specified above.
  - b. All periods of downtime for the capture (collection) system, control device, and monitoring equipment, when the associated coating or printing line was operating and employing solvent based coatings.
  - c. All periods of time when the stack that bypasses the thermal oxidizers was used while employing solvent based coatings in this emissions unit.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

2. The permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any monthly record showing that the VOC content of any non-solvent based coating exceeded the applicable limitation of 0.20 kg per kg of coating solids as applied.

The notification shall include a copy of such record and shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the excursion(s) occurred.

3. Beginning with the first calendar quarter following the installation of the pressure drop monitoring equipment for the PTE, the permittee shall submit quarterly deviation (excursion) reports that identify all three-hour blocks of time, when the emissions unit was in solvent based operation, during which the permanent total enclosure was not maintained at the minimum pressure differential required in A.II.8.
4. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
5. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 365-day VOC emission limitation of 39 tons.
6. The permittee shall submit deviation (excursion) reports that identify all exceedances of the average hourly emission limitation for VOC of 12.31 lbs per hour.
7. The permittee shall submit deviation (excursion) reports that identify all exceedances of the 365-day summation of total VOC usage in the coating line.
8. The permittee shall notify the Director (the Northeast District Office of the Ohio EPA) in writing of any quarterly record showing any unacceptable level of VOCs (greater than 100 ppm) from the positive pressure locations of the lines between the permanent enclosure and the thermal oxidizers. A copy of the record shall be sent to the Northeast District Office of the Ohio EPA within 30 days following the end of the calendar month in which the exceedance occurred.
9. The permittee shall submit quarterly summaries of the daily inspections and weekly velocity or pressure drop measurements for the permanent total enclosure required under A.III.3. The summaries shall identify the days when the permanent total enclosure was not functioning properly, the cause(s) for the improper operation, and corrective actions taken. The quarterly summaries shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## V. Testing Requirements

1. USEPA Method 24 or Method 24A shall be used, in accordance with OAC rule 3745-21-04(B)(5), to determine the VOC contents for all coatings. If, pursuant to section 11.4 of Method 24, 40 CFR Part 60, Appendix A (revised as of July 1, 2001), an owner or operator determines that Method 24 or Method 24A 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 and/or Method 24A.  
Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the cleanup materials.
2. Emission Limitation:  
  
98.5% overall VOC reduction by weight (100% capture and 98.5% destruction)  
  
Applicable Compliance Method:  
  
Performance testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration, using the following methods:  
  
40 CFR Part 60, Appendix A, Methods 25, 25A, and 40 CFR Part 51, Appendix M, Method 204  
  
Performance testing shall be in accordance with OAC rule 3745-21-10(C).
3. Emission Limitation:  
  
0.20 kilogram of VOC per kilogram of solids  
  
Applicable Compliance Method:  
  
Compliance shall be based upon the use of Method 24, or any alternative compliance test method approved by the USEPA for determining the VOC content of each coating, and on the record keeping in Section A.III.4 of these terms and conditions.
4. Emission Limitation:  
  
39 tons VOC per year as a rolling 365-day basis  
  
Applicable Compliance Method:  
  
Compliance shall be determined by the record keeping required in Section A.III.7 of these terms and conditions.
5. Emission Limitation:  
  
12.31 pounds of VOC per hour on a daily average basis  
  
Applicable Compliance Method:  
  
Compliance shall be based on the record keeping requirements in Section A.III.7 of these terms and conditions.

## V. Testing Requirements (continued)

### 6.a Emission testing requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- i. Emission testing was conducted on June 26, 2002 and shall be conducted again within 6 months prior to permit expiration.
- ii. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation and capture efficiency limitation for VOC of 98.5% and 100%, respectively.
- iii. The following test methods shall be employed to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC:

Method 25 of 40 CFR, Part 60 Appendix A, if the VOC concentrations as carbon in the outlet are greater than 50 ppm; or

Method 25A of 40 CFR, Part 60 Appendix A, if the VOC concentrations as carbon in the outlet are less than 50ppm; and

Method 204 of 40 CFR Part 51 Appendix M.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- iv. The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Northeast District Office of the Ohio EPA.

### 6.b The capture efficiency shall be determined using Methods 204 through Method 204F, as specified 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the "Guidelines for Determining Capture Efficiency" dated January 9, 1995. (The Ohio EPA will consider the request for the use of an alternative method, including an evaluation of the applicability, necessity, and validity of the alternative method, and may approve its use, if such approval does not contravene any other applicable requirement.)

The control or destruction efficiency defined as the percent reduction of mass emissions between the inlet and outlet of the control system shall be determined in accordance with the test methods and procedures specified in Ohio Administrative Code 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.

## **V. Testing Requirements (continued)**

- 6.c** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Northeast District Office of the Ohio EPA and the local air agency. 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 District Office's refusal to accept the results of the emission test(s).

Personnel from the Northeast District Office of the Ohio EPA and/or the local air agency 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 Northeast District Office of the Ohio EPA 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 Northeast District Office of the Ohio EPA.

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

## **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>
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**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:** 205-01 Weigh Station (P065)

**Activity Description:** material weigh station

#### 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>
Material weigh stations 205-1, 205-2 and 205-3, Building #5	OAC rule 3745-21-07(G)(2)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05 PTI # 02-7687	Organic compound emissions shall not exceed the following:  1.65 pounds of organic compounds per hour;  39.6 pounds of organic compounds per day; and  7.23 tons of organic compounds per year. See A.1.2.a.

##### 2. Additional Terms and Conditions

- 2.a Hourly and daily monitoring, record keeping and reporting requirements for organic compounds are not required by this permit.

Based on the maximum capacities of all the equipment and an estimate of OC emissions using emission factors from AP-42, Section 4.6 on solvent degreasing, the actual organic compound emissions could not exceed the allowable emission rates established by PTI #02-7687.

##### II. Operational Restrictions

None

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each month the mixers/weigh stations are operating:
  - a. the total number of batches produced in open top drums;
  - b. the total number of batches produced in the totes;
  - c. an estimate of the total monthly OC emission rate, in tons (see Section V.1. for the calculation methodology); and
  - d. a year-to-date summation of the total monthly emissions of OCs, in tons.

### IV. Reporting Requirements

1. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

### V. Testing Requirements

1. Emission Limitation:

1.65 pounds of organic compounds per hour

Applicable Compliance Method:

The permittee uses 350-gallon totes with an open top diameter of 23 inches with a surface area of 2.88 square feet, 55-gallon drums with a diameter of 2 feet and surface area of 3.14 ft<sup>2</sup>, and 5-gallon pails for production.

Due to the open-top nature of these weighing operations, the OC emission rate for this emissions unit (which is based on a modification of the uncontrolled emission factor for cold cleaners in solvent metal service as specified in the USEPA publication, Compilation of Air Pollutant Emission Factors, AP-42, Fourth Edition, September 1985, Section 4.6 on Solvent Degreasing, and a 50% increment to allow for volatilization and losses due to raw material transfer and pail use) is 0.12 lb/hr-ft<sup>2</sup> of organic compounds.

Operating times for the drums and the churns are 20 minutes and 60 minutes respectively.

The diameter and surface area of each of the above containers are as follows using the formula for surface area of  $A=3.14 r \times r$ :

Drum: Diameter = 2 ft; Surface Area = 3.14 ft<sup>2</sup>

Totes: Diameter = 23 inches; Surface Area = 2.88 ft<sup>2</sup>

The maximum actual hourly OC emissions are calculated as follows:

$$[(0.12 \text{ lb/hr-ft}^2) \times (3.14 \text{ ft}^2) \times (3 \text{ drums/hr}) \times (\text{actual operating hours/month}) \times (1 \text{ month/actual operating hours})] + [(0.12 \text{ lb/hr-ft}^2) \times (2.88 \text{ ft}^2) \times (1 \text{ tote/hr}) \times (\text{actual operating hours/month}) \times (1 \text{ month/actual operating hours})] = \text{lbs of OC per hour}$$

The maximum (potential) hourly OC emissions are calculated as follows:

$$[(0.12 \text{ lb/hr-ft}^2) \times (3.14 \text{ ft}^2) \times (3 \text{ drums/hr}) \times (744 \text{ potential hours/month}) \times (1 \text{ month/744 hours})] + [(0.12 \text{ lb/hr-ft}^2) \times (2.88 \text{ ft}^2) \times (1 \text{ tote/hr}) \times (744 \text{ hours/month}) \times (1 \text{ month/744 potential hrs})] = 1.48 \text{ lbs of OC per hour.}$$

## **V. Testing Requirements (continued)**

Changes to vessels that increase the open top surface area or usage will require adjustments to the emission factor in accordance with the above-mentioned calculation procedure.

### **2. Emission Limitation:**

39.6 pounds of organic compounds per day

Applicable Compliance Method:

Because this limit was established by multiplying the short-term limit of 1.65 lbs of OC per hour by 24 hours of operation per day, compliance with the daily limit is assumed provided that compliance with the hourly limit is maintained.

### **3. Emission Limitation:**

7.23 tons of organic compounds per year

Applicable Compliance Method:

Because this limit was established by multiplying the short-term of 1.65 lbs of OC per hour by 8760 hours of operation per year, compliance with the annual limit is assumed, but shall be confirmed by the record keeping specified in Section A.III.1.d. of the terms and conditions 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>
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**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:** Churn Solvent Wash and Recovery System (P071)  
**Activity Description:** churn solvent cleaner with a solvent distillation unit

#### 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>
A 205-1 churn/drum washer with solvent recovery, including injection recovery stations, storage tank; and distillation unit vented to a TOX(s) (Building #5)	OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day, unless said discharge has been reduced by at least 85 %
	OAC rule 3745-31-05 (PTI 02-9846)	See A.I.2.a and A.I.2.b.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G).

##### 2. Additional Terms and Conditions

- 2.a The distillation unit shall be totally enclosed and vented to the thermal oxidizer(s).
- 2.b The permittee shall use good engineering maintenance and practices during the operation of this emissions unit and control equipment.  
  
As part of the BAT requirement for this emissions unit, all emissions from the distillation unit shall be vented to the thermal oxidizer(s).

##### II. Operational Restrictions

1. The average combustion temperature within each thermal oxidizer, 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 that the emissions unit was in compliance.

### 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 temperatures within each thermal oxidizer 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 recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time during which the average combustion temperature within each thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.
  - b. A log or record of the downtime for the capture (collection) system(s), control devices, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall maintain monthly records of the following information:
    - a. the amount of solvent processed through each of the following operations: the dirty solvent tank, the clean solvent tank, the churn and tote cleaning, the cleaning of braided hoses in drums, the drum unloading, and the distillation process, in gallons;
    - b. the OC emissions from each operation identified in (a), using the emission factors specified in A.V.1, in pounds;
    - c. the total OC emissions from all the operations identified in (a), in pounds;
    - d. the total number of days of operation;
    - e. the average daily OC emission rate, in pounds/day;
    - f. the total number of hours of operation; and
    - g. the average hourly OC emission rate, in pounds/hour.

### 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 each thermal oxidizer did not comply with the temperature limitation specified above.
2. The permittee shall submit quarterly deviation reports that identify all exceedances of the 8 pounds/hour and 40 pounds/day emission limitations, unless the permittee has satisfactorily demonstrated to the Director that the control equipment provides at least an 85% overall reduction in the total OC emissions from this emissions unit, whenever the emissions unit is in operation.

## V. Testing Requirements

### 1. Emission Limitation

8 pounds per hour and 40 pounds per day, unless the discharge has been reduced by at least 85%

Applicable Compliance Method

Compliance shall be based upon the record keeping in A.III.2.

The organic compound emission rate for each operation comprising this emissions unit shall be calculated using the following emission factors from AP-42, Section 4.6:

solvent emissions from dirty solvent tank	0.02 lbs OC/ton of solvent
solvent emissions from clean solvent tank	0.02 lbs OC/ton of solvent
fugitive emissions from the churn and tote cleaning	0.92 lbs OC/ton of solvent
fugitive emissions from cleaning braided hoses in drums	0.92 lbs OC/ton of solvent
fugitive emissions from drum unloading	0.92 lbs OC/ton of solvent
controlled emissions from the distillation process $3.3 \times (1.0 - .9937)$	0.021 lbs OC/ton of solvent

If required by the Ohio EPA, emission tests for the distillation unit shall be performed in accordance with USEPA Method 25 and with OAC rule 3745-21-10. Emission factors derived from any required emission tests shall replace the AP-42-derived emission factors.

## 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>
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**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

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