



State of Ohio Environmental Protection Agency

Street Address:

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

05/24/01

CERTIFIED MAIL

**RE: Preliminary Proposed Title V  
Chapter 3745-77 permit**

02-43-11-0099  
PFF/MFD/STD of Avery Dennison (TVP009)  
James E Fear  
Avery Dennison  
7590 Auburn Road  
Painesville, OH 44077

Dear James E Fear:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 02/28/01. The comment period for the Draft permit has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. **Please submit, in writing, any comments you may have within fourteen (14) days from your receipt of this letter to:**

Ohio Environmental Protection Agency  
Jim Orlemann, Manager, Engineering Section  
Division of Air Pollution Control  
P.O.Box 1049  
Columbus, OH 43216-1049

and

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

Also, if you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within fourteen (14) days of your receipt of this letter, we will forward the proposed permit to USEPA for approval. All comments received will be carefully considered before proceeding to the proposed permit.

Very truly yours,

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

cc: Northeast District Office  
File, DAPC PMU



State of Ohio Environmental Protection Agency

**PRELIMINARY PROPOSED TITLE V PERMIT**

Issue Date:	Effective Date:	Expiration Date:
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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	P065 (205-01 Weigh Station) 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		

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

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

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Christopher Jones  
 Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Section

#### 1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
  - iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i)

and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **3. Risk Management Plans**

If 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.

## **4. Title IV Provisions**

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

## **5. Severability Clause**

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

## **6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

## **7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

## **8. Marketable Permit Programs**

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

## **9. Reasonably Anticipated Operating Scenarios**

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

## **10. Reopening for Cause**

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than

the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

## **11. Federal and State Enforceability**

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

## **12. Compliance Requirements**

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

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

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

### **13. Permit Shield**

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

### **14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed

therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

## **15. Emergencies**

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

## **16. Off Permit Changes**

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

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

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

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

**17. Compliance Method Requirements**

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

**18. Insignificant Activity**

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

## **B. State Only Enforceable Section**

### **1. Permit to Install Requirement**

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

### **2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

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

### **3. Records Retention Requirements**

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

### **4. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. 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

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

**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  
K014 Pilot Coating Line  
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

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

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>
I-1 paper and film coating line with thermal oxidizers; EPA 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 emulsion and water based coatings, the VOC content shall not exceed 2.9 pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.
	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.9 of the terms and conditions of this permit.
	40 CFR Part 63, Subpart JJJJ	See Sections A.IV.6 and A.IV.7 of these terms and conditions.

#### 2. Additional Terms and Conditions

- 2.a All the coaters [I-1, I-2, I-3, I-5 and the Building 6 coater (formerly the pilot coater-PTI # 02-14471)] at the Specialty Tape Division (STD) facility shall be vented to two or all 3 of the thermal oxidizers ( T-OX 5-1, T-OX 5-2, and T-OX 5-3 ) 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 all three thermal oxidizers.

If one thermal oxidizer is not operational, a damper monitoring system (DMS) will divert all air flow to the remaining thermal oxidizers. The permittee shall operate and maintain an emergency vent alarm system which ensures that the capacity of the remaining thermal oxidizers 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.
- 2.c A solvent based coating is any coating that has a VOC content greater than 2.9 pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.

## II. Operational Restrictions

1. The average combustion temperature within each thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. Based on the application, this emissions unit shall be enclosed such that all VOC emissions are captured, contained and, when solvent based coatings are being employed, vented to the thermal oxidizers. Compliance with the following criteria, specified by USEPA Method 204, shall be met by the permittee:
  - 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. The permanent total enclosure shall be maintained under negative pressure, at a minimum differential pressure of 0.007 inch of water, as a three-hour average, at all times when the emissions unit is in operation.
4. 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 emulsion or water based coatings.
5. The permittee shall properly maintain and operate the LEL units in the bypass stack, 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.
6. 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.

7. The thermal oxidizer control systems shall be designed and operated according to good engineering practices and the manufacturer's specifications.
8. 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.
9. The permittee shall operate this emissions unit such that the sum of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other material applied at product and packaging rotogravure work stations, including all inboard and outboard stations, in each month 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, 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. 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, control devices, and monitoring equipment, when the associated emissions unit was in operation.
  - 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. The permittee shall operate and maintain monitoring devices and a recorder which continuously and simultaneously measure and record the pressure inside and outside the PTE. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
  3. The permittee shall maintain records of all three-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of .007 inch of water, as a three-hour average.
  4. The permittee shall collect and record daily the following information for the emulsion and water based coatings, and all other coatings employed in this emissions unit that are not vented to the thermal oxidizer:
    - a. the name and identification number of each coating applied; and
    - b. the VOC content of each coating in pounds of VOC per gallon of coating as applied, excluding water and exempt solvents, and the number of gallons, excluding water and exempt solvents, of each coating, as applied.
  5. The LEL in 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 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. The permittee shall inspect and monitor weekly, with a Photoionization Detector or equivalent device, all lines between the total enclosure of the head of the coater and the thermal oxidizers for escaping VOC emissions and maintain records of the results in accordance with the permittee's 1998 preventive maintenance plan. Line speed shall be near maximum during monitoring.

### 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, reducers and other material applied at product and packaging rotogravure stations in each month, including all inboard and outboard stations; and

b. the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers and other material applied at all coating stations in the emissions unit each month;

c. the % of the total mass of all materials applied in the emissions unit that is applied at the product and packaging rotogravure work stations, i.e.,  $a/b \times 100\%$ ; and

d. confirmation that all coaters are stand alone equipment as defined in the rule.

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.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify:

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 when the stack that bypasses the thermal oxidizers was used while employing solvent based coatings in the emissions unit.

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 emulsion or water based coating, or any other coating that is not vented to the thermal oxidizer, 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 submit quarterly deviation (excursion) reports that identify all three-hour blocks of time, when the emissions unit was in operation, during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a three-hour average.
4. The permittee shall submit deviation (excursion) reports that identify all times during which the bypass stack is used while applying any solvent based coating.

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.

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 compared to the total mass of all materials applied in the emissions unit), the limit 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.

#### IV. Reporting Requirements (continued)

6. Within 120 days after promulgation of 40 CFR 63 Subpart JJJJ, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standards. If the permittee is subject to the final standards, the following information shall also be included in the Initial Notification Report:
  - a. the name and mailing address of the permittee;
  - b. the physical location of the source if it is different from the mailing address;
  - c. identification of the relevant MACT standards and the permittee's compliance date;
  - d. 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 hazardous air pollutant; and
  - e. a statement of whether or not the permittee is a major source or an area source according to the promulgated MACT.
7. Within 60 days following completion of any required compliance demonstration activity specified in the 40 CFR 63 Subpart JJJJ, the permittee shall submit a notification of compliance status that contains the following information:
  - a. the methods used to determine compliance;
  - b. the results of any performance test, opacity or visible emission observations, continuous monitoring systems (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
  - c. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
  - d. the type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR 63 Subpart JJJJ;
  - e. an analysis demonstrating whether the affected source is a major source or an area source;
  - f. a description of the air pollution control equipment or method for each emission point, including each control device or method for each hazardous air pollutant and the control efficiency (percent) for each control device or method; and
  - g. a statement of whether or not the permittee has complied with the requirements of 40 CFR 63 Subpart JJJJ.

#### V. Testing Requirements

1. USEPA Method 24 shall be used to determine the VOC contents for all coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or cleanup material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

## V. Testing Requirements (continued)

### 2. Emission Limitation:

81% overall VOC reduction by weight (and 90% destruction)

Applicable Compliance Method:

Performance testing shall be conducted within 3 months after issuance of the permit, and 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 emulsion or water based coatings, 2.9 lbs VOC/gallon coating, as applied, excluding water and exempt solvents.

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 the record keeping in Section A.III.4 of these terms and conditions.

### 4.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 shall be conducted within 3 months after issuance of this permit, and 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.

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.

## V. Testing Requirements (continued)

- 4.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.

- 4.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

- 1.** 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.

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

**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

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>
I-2 paper and film coating line with thermal oxidizers; EPA 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 emulsion and water based coatings, the VOC content shall not exceed 2.9 pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents. See A.I.2.c.
	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.9 of the terms and conditions of this permit.
	40 CFR Part 63, Subpart JJJJ	See Sections A.IV.6 and A.IV.7 of these terms and conditions.

#### 2. Additional Terms and Conditions

- 2.a All the coaters [I-1, I-2, I-3, I-5 and the Building 6 coater (formerly the pilot coater-PTI # 02-14471)] at the Specialty Tape Division (STD) facility shall be vented to two or all 3 of the thermal oxidizers ( T-OX 5-1, T-OX 5-2, and T-OX 5-3 ) 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 all three thermal oxidizers.

If one thermal oxidizer is not operational, a damper monitoring system (DMS) will divert all air flow to the remaining thermal oxidizers. The permittee shall operate and maintain an emergency vent alarm system which ensures that the capacity of the remaining thermal oxidizers 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.
- 2.c A solvent based coating is any coating that has a VOC content greater than 2.9 pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.

## II. Operational Restrictions

1. The average combustion temperature within each thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. Based on the application, this emissions unit shall be enclosed such that all VOC emissions are captured, contained and, when solvent based coatings are being employed, vented to the thermal oxidizers. Compliance with the following criteria, specified by USEPA Method 204, shall be met by the permittee:
  - 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. The permanent total enclosure shall be maintained under negative pressure, at a minimum differential pressure of 0.007 inch of water, as a three-hour average, at all times when the emissions unit is in operation.
4. 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 emulsion or water based coatings.
5. The permittee shall properly maintain and operate the LEL units in the bypass stack, 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.
6. 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.

7. The thermal oxidizer control systems shall be designed and operated according to good engineering practices and the manufacturer's specifications.
8. 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.
9. The permittee shall operate this emissions unit such that the sum of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other material applied at product and packaging rotogravure work stations, including all inboard and outboard stations, in each month 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, 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. 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, control devices, and monitoring equipment, when the associated emissions unit was in operation.
  - 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. The permittee shall operate and maintain monitoring devices and a recorder which continuously and simultaneously measure and record the pressure inside and outside the PTE. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
  3. The permittee shall maintain records of all three-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of .007 inch of water, as a three-hour average.
  4. The permittee shall collect and record daily the following information for the emulsion and water based coatings, and all other coatings employed in this emissions unit that are not vented to the thermal oxidizer:
    - a. the name and identification number of each coating applied; and
    - b. the VOC content of each coating in pounds of VOC per gallon of coating as applied, excluding water and exempt solvents, and the number of gallons, excluding water and exempt solvents, of each coating, as applied.
  5. The LEL in 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 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. The permittee shall inspect and monitor weekly, with a Photoionization Detector or equivalent device, all lines between the total enclosure of the head of the coater and the thermal oxidizers for escaping VOC emissions and maintain records of the results in accordance with the permittee's 1998 preventive maintenance plan. Line speed shall be near maximum during monitoring.

### 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, reducers and other materials applied at product and packaging rotogravure stations in each month, including all inboard and outboard stations; and

b. the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers and other materials applied at all coating stations in the emissions unit each month;

c. the % of the total mass of all materials applied in the emissions unit that is applied at the product and packaging rotogravure work stations, 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.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify:

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 when the stack that bypasses the thermal oxidizers was used while employing solvent based coatings in the emissions unit.

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 emulsion or water based coating, or any other coating that is not vented to the thermal oxidizer, 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 submit quarterly deviation (excursion) reports that identify all three-hour blocks of time, when the emissions unit was in operation, during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a three-hour average.
4. The permittee shall submit deviation (excursion) reports that identify all times during which the bypass stack is used while applying any solvent based coating.

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.

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 press compared to the total mass of all materials applied on the coating line), the limit 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.

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

6. Within 120 days after promulgation of 40 CFR 63 Subpart JJJJ, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standards. If the permittee is subject to the final standards, the following information shall also be included in the Initial Notification Report:
  - a. the name and mailing address of the permittee;
  - b. the physical location of the source if it is different from the mailing address;
  - c. identification of the relevant MACT standards and the permittee's compliance date;
  - d. 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 hazardous air pollutant; and
  - e. a statement of whether or not the permittee is a major source or an area source according to the promulgated MACT.
7. Within 60 days following completion of any required compliance demonstration activity specified in the 40 CFR 63 Subpart JJJJ, the permittee shall submit a notification of compliance status that contains the following information:
  - a. the methods used to determine compliance;
  - b. the results of any performance test, opacity or visible emission observations, continuous monitoring systems (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
  - c. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
  - d. the type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR 63 Subpart JJJJ;
  - e. an analysis demonstrating whether the affected source is a major source or an area source;
  - f. a description of the air pollution control equipment or method for each emission point, including each control device or method for each hazardous air pollutant and the control efficiency (percent) for each control device or method; and
  - g. a statement of whether or not the permittee has complied with the requirements of 40 CFR 63 Subpart JJJJ.

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

1. USEPA Method 24 shall be used to determine the VOC contents for all coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or cleanup material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

## V. Testing Requirements (continued)

### 2. Emission Limitation:

81% overall VOC reduction by weight (and 90% destruction)

Applicable Compliance Method:

Performance testing shall be conducted within 3 months after issuance of the permit, and 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 emulsion or water based coatings, 2.9 lbs VOC/gallon coating, as applied, excluding water and exempt solvents.

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.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 shall be conducted within 3 months after issuance of this permit, and 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.

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.

## V. Testing Requirements (continued)

- 4.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.

- 4.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

- 1.** 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.

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

**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

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>
I-3 paper and film coating line with thermal oxidizers; EPA 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) and PTI # 02-493	For emulsion and water based coatings, the VOC content shall not exceed 2.9 pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents. See A.I.2.c.
	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.9 of the terms and conditions of this permit.
	40 CFR Part 63, Subpart JJJJ	See Sections A.IV.6 and A.IV.7 of these terms and conditions.

##### 2. Additional Terms and Conditions

- 2.a All the coaters [I-1, I-2, I-3, I-5 and the Building 6 coater (formerly the pilot coater-PTI # 02-14471)] at the Specialty Tape Division (STD) facility shall be vented to two or all 3 of the thermal oxidizers ( T-OX 5-1, T-OX 5-2, and T-OX 5-3 ) 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 all three thermal oxidizers.

If one thermal oxidizer is not operational, a damper monitoring system (DMS) will divert all air flow to the remaining thermal oxidizers. The permittee shall operate and maintain an emergency vent alarm system which ensures that the capacity of the remaining thermal oxidizers 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.
- 2.c A solvent based coating is any coating that has a VOC content greater than 2.9 pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.

## II. Operational Restrictions

1. The average combustion temperature within each thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. Based on the application, this emissions unit shall be enclosed such that all VOC emissions are captured, contained and, when solvent based coatings are being employed, vented to the thermal oxidizers. Compliance with the following criteria, identified by USEPA Method 204, shall be met by the permittee:
  - 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. The permanent total enclosure shall be maintained under negative pressure, at a minimum differential pressure of 0.007 inch of water, as a three-hour average, at all times when the emissions unit is in operation.
4. 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 emulsion or water based coatings.
5. The permittee shall properly maintain and operate the LEL units in the bypass stack, 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.
6. 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.

7. The thermal oxidizer control systems shall be designed and operated according to good engineering practices and the manufacturer's specifications.
8. 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.
9. The permittee shall operate this emissions unit such that the sum of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other material applied at product and packaging rotogravure work stations, including all inboard and outboard stations, in each month 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, 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. 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, control devices, and monitoring equipment, when the associated emissions unit was in operation.
  - 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. The permittee shall operate and maintain monitoring devices and a recorder which continuously and simultaneously measure and record the pressure inside and outside the PTE. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
  3. The permittee shall maintain records of all three-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of .007 inch of water, as a three-hour average.
  4. The permittee shall collect and record daily the following information for the emulsion and water based coatings, and all other coatings employed in this emissions unit that are not vented to the thermal oxidizer:
    - a. the name and identification number of each coating applied; and
    - b. the VOC content of each coating in pounds of VOC per gallon of coating as applied, excluding water and exempt solvents, and the number of gallons, excluding water and exempt solvents, of each coating, as applied.
  5. The LEL in 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 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. The permittee shall inspect and monitor weekly, with a Photoionization Detector or equivalent device, all lines between the total enclosure of the head of the coater and the thermal oxidizers for escaping VOC emissions and maintain records of the results in accordance with the permittee's 1998 preventive maintenance plan. Line speed shall be near maximum during monitoring.

### 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, reducers and other materials applied at product and packaging rotogravure stations in each month, including all inboard and outboard stations; and
  - b. the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers and other materials applied at all coating stations in the emissions unit each month;
  - c. the % of the total mass of all materials applied in the emissions unit that is applied at the product and packaging rotogravure work stations, 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.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify:
- 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 when the stack that bypasses the thermal oxidizers was used while employing solvent based coatings in the emissions unit.
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 emulsion or water based coating, or any other coating that is not vented to the thermal oxidizer, 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 submit quarterly deviation (excursion) reports that identify all three-hour blocks of time, when the emissions unit was in operation, during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a three-hour average.
4. The permittee shall submit deviation (excursion) reports that identify all times during which the bypass stack is used while applying any solvent based coating.

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.

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 press compared to the total mass of all materials applied on the coating line), the limit 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.

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

6. Within 120 days after promulgation of 40 CFR 63 Subpart JJJJ, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standards. If the permittee is subject to the final standards, the following information shall also be included in the Initial Notification Report:
  - a. the name and mailing address of the permittee;
  - b. the physical location of the source if it is different from the mailing address;
  - c. identification of the relevant MACT standards and the permittee's compliance date;
  - d. 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 hazardous air pollutant; and
  - e. a statement of whether or not the permittee is a major source or an area source according to the promulgated MACT.
7. Within 60 days following completion of any required compliance demonstration activity specified in the 40 CFR 63 Subpart JJJJ, the permittee shall submit a notification of compliance status that contains the following information:
  - a. the methods used to determine compliance;
  - b. the results of any performance test, opacity or visible emission observations, continuous monitoring systems (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
  - c. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
  - d. the type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR 63 Subpart JJJJ;
  - e. an analysis demonstrating whether the affected source is a major source or an area source;
  - f. a description of the air pollution control equipment or method for each emission point, including each control device or method for each hazardous air pollutant and the control efficiency (percent) for each control device or method; and
  - g. a statement of whether or not the permittee has complied with the requirements of 40 CFR 63 Subpart JJJJ.

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

1. USEPA Method 24 shall be used to determine the VOC contents for all coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or cleanup material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

**V. Testing Requirements (continued)**

**2. Emission Limitation:**

81% overall VOC reduction by weight (and 90% destruction)

Applicable Compliance Method:

Performance testing shall be conducted within 3 months after issuance of the permit, and within 6 months prior to permit renewal, 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 emulsion or water based coatings, 2.9 lbs VOC/gallon coating, as applied, excluding water and exempt solvents.

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.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 shall be conducted within 3 months after issuance of this permit, and 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.

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.

## V. Testing Requirements (continued)

- 4.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.

- 4.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

- 1.** 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.

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

**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>
K014 - Building #6 coating line for adhesive and hot melt products with thermal oxidizer(s)	OAC rule 3745-31-05(A)(2) and (A)(3) PTI # 02-4109	98.5 % overall reduction of VOC by weight (100 % capture and 98.5 % destruction) for all solvent based coatings;  11.44 lbs per hour VOC on a daily average-basis, including cleanup, and 6.72 tons per year on a rolling 365-day basis including cleanup;  The BAT determination also includes compliance with 40 CFR Part 60 Subpart RR, OAC rule 3745-21-09(Y), 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 emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-21-09(Y)	Exempt by OAC 3745-21-09(Y) (2)(b). See A.II.10.
	40 CFR Part 60 Subpart RR	148 tons per year of coating and ink usage  The control efficiency emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
		VOC content emissions shall not exceed 0.20 kg /kg of coating solids applied when employing emulsion or water based coatings.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	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.9 of the terms and conditions of this permit.
	40 CFR Part 63 Subpart JJJJ (Paper and Web Coating MACT)	See Sections IV.7 and IV.8 of these terms and conditions.

**2. Additional Terms and Conditions**

- 2.a. All the coaters (I-1, I-2, I-3, I-5 and the Building 6 coater formerly the pilot coater at the Specialty Tape Division (STD) facility shall be vented to two or all of the 3 thermal oxidizers (#5-1, #5-2, and #5-3) through a manifolded system of delivery.

The normal operating scenario for this facility during the application of solvent based coatings shall be the use of all three oxidizers.

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

- 2.b. The permittee shall install and maintain a permanent total enclosure (PTE) which complies with the requirements in 40 CFR, Part 51, Appendix M, Reference Method 204, to capture all the VOC emissions from this emissions unit.
- 2.c. A solvent based coating is any coating that has a VOC content greater than 0.20 kg per kg of solids applied.

**II. Operational Restrictions**

1. The average combustion temperature within each thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. This emissions unit shall be totally enclosed such that all VOC emissions are captured, contained and, when solvent based coatings are being employed, vented to the thermal oxidizers. Compliance with the following criteria, identified by USEPA Method 204, shall be met by the permittee:
  - 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 and shall not vent through any bypass stack except when employing only emulsion or water based coatings.
4. The permittee shall properly maintain and operate the LEL units in the plenum just prior to the bypass stack 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.

## II. Operational Restrictions (continued)

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. The permanent total enclosure shall be maintained under negative pressure, at a minimum differential pressure of 0.007 inch of water, as a three-hour average, at all times when the emissions unit is in operation.
9. The permittee shall operate this emissions unit such that the sum of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other material applied by product and packaging rotogravure work stations and the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other material applied by wide web flexographic print stations in each month 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, as described in Section 63.821(A).

In the event that the percent (%) 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.

10. The permittee shall limit usage of coatings and inks in this emissions unit to less than 148 tons per year.

In the event that usage of coatings and inks in this emissions unit exceeds 148 tons, the printing line shall no longer be exempted from OAC rule 3745-21-09(Y)(1).

11. 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 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 operate and maintain monitoring devices and a recorder which continuously and simultaneously measure and record the pressure inside and outside the PTE. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

3. The permittee shall maintain records of all three-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water, as a three-hour average.
4. The permittee shall collect and record the following information daily for the emulsion and water based coatings employed in this emissions unit:
  - 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;
  - d. the total VOC emissions from all emulsion and water based 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.
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.

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

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 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 weekly, with a Photoionization Dectector or equivalent device, all lines between the total enclosure of the head of the coaters and the thermal oxidizers for escaping VOC emissions and maintain records of the results in accordance with the permittee's 1998 preventive maintenance plan. Line speed shall be near maximum during monitoring.
11. The permittee shall maintain records of all three-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inch of water.
12. 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, reducers and other material applied at product and packaging rotogravure stations in each month, including all inboard and outboard stations; and
  - b. the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers and other materials applied at all coating stations in the emissions unit each month;
  - c. the % of the total mass of all materials applied in the emissions unit that is applied at the product and packaging rotogravure work stations, i.e.,  $a/b \times 100\%$ ; and
  - d. confirmation that all coaters are stand alone equipment as defined in the rule.
13. 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.
  14. The permittee shall collect and record monthly the following information:
    - a. the name and identification number of each coating employed;
    - b. the name and identification number of each ink employed;
    - c. the number of gallons of each coating employed;
    - d. the number of gallons of each ink employed;
    - c. the density of each coating employed, in pounds per gallon;
    - d. the density of each ink employed, in pounds per gallon;
    - e. the amount of coating and inks employed in this emissions unit, in tons; and
    - f. the year-to-date summation of the amount of all coatings and inks employed in this emissions unit, in tons.

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

1. The permittee shall submit quarterly deviation (excursion) reports which identify:
  - 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 when the stack that bypasses the thermal oxidizers was used while employing solvent based coatings in the emissions unit.
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 emulsion or water 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 45 days after the exceedance(s) occurred.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all three-hour blocks of time, when the emissions unit was in operation, during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inch of water, as a three-hour average.
4. The permittee shall submit annual reports which 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. Within 120 days after promulgation of 40 CFR 63 Subpart JJJJ, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to any promulgated standards. If the permittee is subject to the final standards, the following information shall also be included in the Initial Notification Report:
  - a. the name and mailing address of the permittee;
  - b. the physical location of the source if it is different from the mailing address;
  - c. identification of the relevant MACT standards and the permittee's compliance date;
  - d. 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 hazardous air pollutant; and
  - e. a statement of whether or not the permittee is a major source or an area source according to the promulgated MACT.

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

8. Within 60 days following completion of any required compliance demonstration activity specified in the 40 CFR 63 Subpart JJJJ, the permittee shall submit a notification of compliance status that contains the following information:
  - a. the methods used to determine compliance;
  - b. the results of any performance test, opacity or visible emission observations, continuous monitoring systems (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
  - c. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
  - d. the type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR 63 Subpart JJJJ;
  - e. an analysis demonstrating whether the affected source is a major source or an area source;
  - f. a description of the air pollution control equipment or method for each emission point, including each control device or method for each hazardous air pollutant and the control efficiency (percent) for each control device or method; and
  - g. a statement of whether or not the permittee has complied with the requirements of 40 CFR 63 Subpart JJJJ.
9. 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 compared to the total mass of all materials applied in the emissions unit), the limit 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.
10. The permittee shall submit deviation (excursion) reports that identify all exceedances of the 148 tons/year coating and ink usage limitation.

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

1. USEPA Method 24 shall be used to determine the VOC contents for all coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or cleanup material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.
2. Emission Limitation:

98.5% overall VOC reduction by weight (100% capture and 98.5% destruction) for all coatings except emulsion and water based coatings.

Applicable Compliance Method:

Performance testing shall be conducted within 3 months after issuance of the permit, and 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**

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 emulsion or water 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.

**6. Emission Limitation**

148 tons per year of coating and ink usage

Applicable Compliance Method

Compliance shall be based upon the record keeping requirements in Section A.III.14 of these terms and conditions.

## V. Testing Requirements (continued)

### 7.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 shall be conducted within 3 months after issuance of this permit, and 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.

### 7.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.

### 7.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**

1. 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.

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.

**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; EPA unit number K016 ( Building #5 )	OAC rule 3745-21-09 (F)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart RR, section 60.442(a)(1) and the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	40 CFR Part 60, Subpart RR	For solvent based coatings, the control efficiency limitations specified by this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05 PTI #02-7206 (synthetic minor)	0.20 kg VOC/kg of coating solids applied, for emulsion and water based coatings.  12.31 pounds VOC per hour from the coating line, including cleanup, as a daily average;
	40 CFR Part 63, Subpart KK (National Emission Standards for the Printing and Publishing Industry)	39 tons VOC per year, on a rolling, 365-day basis, from the coating line, including cleanup; and  98.5% overall VOC reduction by weight ( 100% capture and 98.5% destruction ) for all solvent based coatings. See A.I.2.c.
40 CFR Part 63, Subpart JJJJ	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.  See Sections A.IV.7 and A.IV.8 of these terms and conditions.	

## 2. Additional Terms and Conditions

- 2.a** All the coaters [I-1, I-2, I-3, I-5 and the Building 6 coater (formerly the pilot coater-PTI # 02-14471)] at the Specialty Tape Division (STD) facility shall be vented to two or all 3 of the thermal oxidizers ( T-OX 5-1, T-OX 5-2, and T-OX 5-3 ) 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 all three thermal oxidizers.

If one thermal oxidizer is not operational, a damper monitoring system (DMS) will divert all air flow to the remaining thermal oxidizers. The permittee shall operate and maintain an emergency vent alarm system which ensures that the capacity of the remaining thermal oxidizers 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.
- 2.c** A solvent based coating is any coating that has a VOC content greater than 0.20 kg per kg of solids applied.

## II. Operational Restrictions

1. The average combustion temperature within each thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
2. The emissions unit shall be enclosed such that all VOC emissions are captured, contained and, when solvent based coatings are being employed, vented to the thermal oxidizers. Compliance with the following criteria, identified by USEPA Method 204, shall be met by the permittee:
  - 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 and shall not vent through any bypass stack except when employing only emulsion or water based coatings.
4. The permittee shall properly maintain and operate the LEL units in the bypass stack, 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.

## II. Operational Restrictions (continued)

8. The permanent total enclosure shall be maintained under negative pressure, at a minimum differential pressure of 0.007 inch of water, as a three-hour average, at all times when the emissions unit is in operation.
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 permittee shall operate this emissions unit such that the sum of the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers, and other material applied at product and packaging rotogravure work stations, including all inboard and outboard stations, in each month 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, 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. 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, control devices, and monitoring equipment, when the associated emissions unit was in operation.
  - 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. The permittee shall operate and maintain monitoring devices and a recorder which continuously and simultaneously measure and record the pressure inside and outside the PTE. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
  3. The permittee shall maintain records of all three-hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of .007 inch of water.
  4. The permittee shall collect and record daily the following information for the emulsion and water based coatings, and all other coatings employed in this emissions unit that are not vented to a thermal oxidizer:
    - 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 pounds per gallon, excluding water and exempt solvents;
    - c. the number of gallons of each coating material employed, excluding water and exempt solvents; and
    - d. the total VOC emissions from all emulsion and water based coatings employed, in pounds and tons.

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

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).
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 emission 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 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 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 weekly, with a Photoionization Detector or equivalent device, all lines between the total enclosure of the head of the coater and the thermal oxidizers for escaping VOC emissions and maintain records of the results in accordance with the permittee's 1998 preventive maintenance plan. Line speed shall be near maximum during monitoring.

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

11. 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, reducers and other material applied at product and packaging rotogravure stations in each month, including all inboard and outboard stations; and
  - b. the total mass of inks, coatings, varnishes, adhesives, primers, solvents, thinners, reducers and other material applied at all coating stations in the emissions unit each month;
  - c. the % of the total mass of all materials applied in the emissions unit that is applied at the product and packaging rotogravure work stations, i.e.,  $a/b \times 100\%$ ; and
  - d. confirmation that all coaters are stand alone equipment as defined in the rule.
12. 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.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify:
  - 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 when the stack that bypasses the thermal oxidizers was used while employing solvent based coatings in the emissions unit.
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 emulsion or water based coating, or any other coating that is not vented to a thermal oxidizer, 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 45 days after the exceedance(s) occurred.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all three-hour blocks of time, when the emissions unit was in operation, during which the permanent total enclosure was not maintained in compliance with the minimum pressure differential of 0.007 inch of water.
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 5% limit (the ratio of total mass of all materials applied on the product and packaging rotogravure work stations compared to the total mass of all materials applied in the emissions unit), the limit 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 deviation (excursion) reports which identify all exceedances of the rolling, 365-day VOC emission limitation of 39 tons.

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

7. 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.
  
8. Within 120 days after promulgation of 40 CFR 63 Subpart JJJJ, the permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the promulgated standards. If the permittee is subject to the final standards, the following information shall also be included in the Initial Notification Report:
  - a. the name and mailing address of the permittee;
  - b. the physical location of the source if it is different from the mailing address;
  - c. identification of the relevant MACT standards and the permittee's compliance date;
  - d. 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 hazardous air pollutant; and
  - e. a statement of whether or not the permittee is a major source or an area source according to the promulgated MACT.
  
9. Within 60 days following completion of any required compliance demonstration activity specified in the 40 CFR 63 Subpart JJJJ, the permittee shall submit a notification of compliance status that contains the following information:
  - a. the methods used to determine compliance;
  - b. the results of any performance test, opacity or visible emission observations, continuous monitoring systems (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
  - c. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
  - d. the type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times in accordance with the test methods specified in 40 CFR 63 Subpart JJJJ;
  - e. an analysis demonstrating whether the affected source is a major source or an area source;
  - f. a description of the air pollution control equipment or method for each emission point, including each control device or method for each hazardous air pollutant and the control efficiency (percent) for each control device or method; and
  - g. a statement of whether or not the permittee has complied with the requirements of 40 CFR 63 Subpart JJJJ.
  
10. The permittee shall submit deviation (excursion) reports that identify all exceedances of the 365-day summation of total VOC usage in the coating line.

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

1. USEPA Method 24 shall be used to determine the VOC contents for all coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating or cleanup material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or cleanup material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

**V. Testing Requirements (continued)**

**2. Emission Limitation:**

98.5% overall VOC reduction by weight (100% capture and 98.5% destruction) for all coatings except emulsion and water based coatings

Applicable Compliance Method:

Performance testing shall be conducted within 3 months after issuance of the permit, and 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, as applied, when employing emulsion or water 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 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. The emission testing shall be conducted within 3 months after issuance of this permit, and 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.

### 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**

1. 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.

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

**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)  OAC rule 3745-31-05 PTI # 02-7687	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).  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.I.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 churns;
  - 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:

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) is 0.12 lb/hr-ft<sup>2</sup> of organic compounds.

Based on 1992 production data, the permittee manufactures approximately 64% of the production volume in 450-gallon portable churns, and 36% of production volume in 55-gallon drums. Operating times for the drums and the churns is distributed correspondingly in a 36% and 64% manner.

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>

Portable Churn: Diameter = 5 ft; Surface Area = 19.63 ft<sup>2</sup>

The maximum actual hourly OC emissions are calculated as follows:

$$[(0.12 \text{ lb/hr-ft}^2) \times (3.14 \text{ ft}^2) \times (\text{actual hrs/yr} \times .36) + (0.12 \text{ lb/hr-ft}^2) \times (19.63 \text{ ft}^2) \times (\text{actual hrs/yr} \times .64)]$$
  
[1yr/actual hrs] = lbs of OC per hour.

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

$$[(0.12 \text{ lb/hr-ft}^2) \times (3.14 \text{ ft}^2) \times (8760 \text{ hrs/yr} \times .36) + (0.12 \text{ lb/hr-ft}^2) \times (19.63 \text{ ft}^2) \times (8760 \text{ hrs/yr} \times .64)]$$
  
[1yr/8760] = 1.64 lbs of OC per hour.

**V. Testing Requirements (continued)**

**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 providing that compliance with the hourly limit is maintained.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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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 tanks, and distillation unit; (Building #5)	OAC 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day, see A.I.2.a

##### 2. Additional Terms and Conditions

- 2.a Monitoring and record keeping requirements for the hourly and daily organic compound emission limitations are not required for this emissions unit.

Based on the maximum capacity of the equipment and an estimate of total controlled OC emissions based on AP-42, Section 4.8, Tank and Drum Cleaning, the actual hourly and daily organic compound emissions could not exceed the allowable emission rates from this rule.

##### II. Operational Restrictions

1. The distillation unit shall be totally enclosed and vented to the thermal oxidizer(s).

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.

The permittee shall use good engineering maintenance and practices during the operation of this emissions unit and control equipment.

### 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.

### 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.

### V. Testing Requirements

1. Emission Limitation

8 pounds per hour and 40 pounds per day

Applicable Compliance Method

The organic compound emission rate for this emissions unit is based on 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 0.021 lbs OC/ton of solvent

If required by the Ohio EPA, compliance with the allowable emission limitations shall be demonstrated by performing emission tests in accordance with USEPA Method 25.

### 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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