



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

06/30/99

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

02-43-00-1188
Marking Films Div. of Avery Dennison Building #11
Louise Watson
670 Hardy Road
Building #11
Painesville, OH 44077-4573

Dear Louise Watson:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Northeast District Office within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions or comments concerning this draft Title V permit, please contact Northeast District Office.

Very truly yours,

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

cc: USEPA (electronic)
Jim Orlemann, DAPC Engineering
Michael Ahern, DAPC PMU
Northeast District Office
Pennsylvania



Ohio EPA

State of Ohio Environmental Protection Agency

TITLE V PERMIT

Issue Date: 06/30/99

DRAFT

Effective Date:

Expiration Date:

This document constitutes issuance to:

Marking Films Div. of Avery Dennison Building #11
670 Hardy Road
Building #11
Painsville, OH 21663-9378

of a Title V permit for Facility ID: 02-43-00-1188

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

K001 (F-1 Coater)
F-1 Coater - Custom Coating Line (K001)

K002 (F-2 Coater)
F-2 Coater - Adhesive Coating Line (K002) & F-2 Corona Treater (OEPA Source #P004)

K003 (F-3 Coater)
F-3 Coater - Adhesive Coating Line (K003) & F-3 Corona Treater

P001 (Churn Cleaner)
670-1 Churn Washer/Solvent Reclaim Unit

P006 (Mixer)
670-5 50-HP Compounding Mixer

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

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.

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

None

B. State Only Enforceable Section

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

P003-670-1 Versator Cleaning
P005-670-1 25-HP Compounding Mixer
P007-670-3 10-HP Compounding Mixer
Z001-670-1B Solvent Wash Tank (F-1)(One of six wash tanks included in OEPA Permit ID:L001)
Z002-670-1A Solvent Wash Tank(F-1)(One of six wash tanks included in OEPA Permit ID:L001)
Z003-670-2B Solvent Wash Tank(F-2)(One of six wash tanks included in OEPA Permit ID:L001)
Z004-670-4 Solvent Wash Tank(Cmp. Rm.)(One of six wash tanks included in OEPA Permit ID:L001)
Z005-670-3 Solvent Wash Tank (Adh. Rm.)(One of six wash tanks included in OEPA Permit ID:L001)
Z006-670-2A Solvent Wash Tank (F-2)(One of six wash tanks included in OEPA Permit ID:L001)
Z007-670-5 Solvent Wash Tank
Z008-670-6 Solvent Wash Tank
Z009-670-7 Solvent Wash Tank
Z010-670-8 Solvent Wash Tank
Z012-670-2 25HP Adhesive
Z013-670-1 10-HP Adhesive Mixer(One of two mixers included in OEPA Permit ID: P002)
Z014-670-1 Vorta Siv
Z015-670-1 Welding Station
Z016-Water based wash tank (F-3 Coater) Adhesive delivery system
Z017-Solvent Wash Tank (F-3 Coater) Adhesive delivery system
Z018-Five (5) 1-HP Bench top mixers (Color Lab)

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: F-1 Coater (K001)
Activity Description: F-1 Coater - Custom Coating Line (K001)

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>
F-1 adhesive coating line with thermal oxidizer #1	OAC rule 3745-21-09(F)	Less stringent than the limit established by OAC rule 3745-31-05.
	40 CFR, Part 60, Subpart RR	The limits (including 90% overall VOC emission reduction and 0.20 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month) established by this rule are equivalent or less stringent than the limits established by OAC rule 3745-31-05.
	OAC rule 3745-31-05 PTI 02-3702 (synthetic minor)	39.36 tons VOC per year as a rolling 365-day basis; 90.16% overall VOC reduction by weight (92% capture and 98.0% destruction) for all coatings except emulsion and silicon based coatings; for emulsion and silicon based coatings, the VOC content shall not exceed 2.6 pounds VOC per gallon of coating, excluding water and exempt solvents, on a daily volume-weighted average basis

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

II. Operational Restrictions (continued)

2. The thermal oxidizer control system shall be designed and operated according to good engineering practices and manufacturer's specifications.
3. The permittee shall limit coating usage so that the amount of VOC applied is no more than 400 tons per rolling 365-day period according to synthetic minor PTI #02-3702 restrictions.
4. The coating line shall be vented to the thermal oxidizer at all times and shall not vent through the bypass stack except when employing emulsion or silicon based coatings.
5. The permittee shall properly maintain and operate the LEL units in the bypass stack, to ensure that waste streams from solvent based coatings do not go directly to the ambient air.
6. During the application of non-compliant surface coatings (that is during the required use of a thermal oxidizer with or without enclosure), the permittee shall ensure that any inline bypass that could divert solvent laden air from the abatement device associated with each coating applicator which complies with the applicable capture and control efficiency requirements, or complies with the overall control efficiency requirements contained in OAC 3745-21-09(B)(6), is closed.

In addition, any device in the bypass which indicates 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 manufacturer's recommendations, instructions and operating manuals.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal 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 monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, 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 emission unit was in compliance.
- b. A log or record of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

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

2. The permittee shall collect and record the following information daily for all coatings and associated cleanup materials, except emulsion and silicon based coatings:
 - a. The name and identification number of each coating, as applied.
 - b. The VOC content of each coating, excluding water and exempt solvents, as applied, in pounds per gallon.
 - c. The number of gallons of each coating employed, excluding water and exempt solvents.
 - d. The name and identification of each cleanup material employed.
 - e. The number of gallons of each cleanup material employed.
 - f. The VOC content of each cleanup material, in pounds per gallon.
 - g. The total uncontrolled VOC emissions from all coatings and from all cleanup materials employed, in pounds or tons.
 - h. The calculated, controlled VOC emission rate for all coatings, in pounds or tons (the controlled VOC emission rate for the coatings shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance) and the uncontrolled emissions from all cleanup materials.
 - i. The total VOC emission rate, including controlled VOC emissions from the coatings plus uncontrolled emissions from cleanup materials.
3. The permittee shall collect and record the following information daily for all the emulsion and silicon based coatings and associated cleanup materials employed in this emissions unit:
 - a. The name and identification number of each coating applied;
 - b. The VOC content of each coating as applied, excluding water and exempt solvents, as applied, in pounds per gallon.
 - c. The number of gallons of each coating employed, excluding water and exempt solvents.
 - d. The name and identification of each cleanup material employed.
 - e. The number of gallons of each cleanup material employed.
 - f. The VOC content of each cleanup material, in pounds per gallon.
 - g. The total VOC emissions from all coatings employed and from all coatings and cleanup materials employed, in pounds or tons.
 - h. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for $C_{voc,2}$.
4. The permittee shall record the following information daily:
 - a. The total daily VOC emissions from this emissions unit, i.e., 2.i + 3.g.
 - b. The rolling, 365-day summation of total VOC emissions.
 - c. The total daily VOC usage rate (total uncontrolled VOC emissions) in this coating line, i.e., 2.g (for coatings only)+ 3.g (for coatings only).
 - d. The rolling, 365-day summation of total VOC usage rate.

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

5. The permittee shall maintain records of maintenance and operation of the LEL units which ensure that waste streams 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 upon request during normal business hours.
6. The LEL in the bypass stack shall be monitored daily to ensure the use of the thermal oxidizer during solvent based coating.
7. The permittee shall maintain a calendar month record of all coatings used and the results of Method 24 or any alternative compliance test method approved by the Ohio EPA for determining the VOC content of each coating.

IV. Reporting Requirements

1. For solvent based coating operations:

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, does not comply with the temperature limitation specified above.
 - b. Any incidences where the stack that bypasses the thermal incinerator is used while employing solvent based coatings.
2. The permittee shall notify the Northeast District Office of the Ohio EPA in writing of any daily record showing that the daily volume-weighted average VOC content of the emulsion and/or silicon based coatings exceeds the applicable limitation of 2.6 lbs/gallon. 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 after the exceedance occurs.
 3. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 365-day VOC usage limitation of 400 tons and the rolling, 365-day VOC emission limit of 39.36 tons.
 4. The permittee shall submit annual reports which specify the total VOC emissions and the total VOC usage for this emissions unit. These reports shall be submitted by January 31 of each year.

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:

90.16% overall VOC reduction by weight (92% capture and 98% destruction)

Applicable Compliance Method:

Performance testing shall be conducted no later than 2.5 years after the issuance of this permit, and every 3 years thereafter, using the following methods: 40 CFR Part 60, Appendix A, Methods 25, 25A and 40 CFR Part 51, Appendix M, Method 204.
3. Emission Limitation:

For emulsion or silicon based coatings: 2.6 lbs VOC/gallon coating applied, excluding water and exempt solvents, on a daily volume-weighted average basis.

Applicable Compliance Method:

Compliance shall be based on the record keeping specified in Section A.III.3. of these terms and conditions.

V. Testing Requirements (continued)

4. Emission Limitation:

39.36 tons per year

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements of Section A.III.2-4 of these terms and conditions.

5.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 2.5 years after the issuance of this permit and 6 months prior to permit renewal.

ii. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and destruction efficiency limitations for VOC of 92% and 98.0%, 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.

5.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.

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

V. Testing Requirements (continued)

- 5.c** Personnel from the appropriate Ohio EPA District Office or 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

- 1.** The 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.

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: F-2 Coater (K002)

Activity Description: F-2 Coater - Adhesive Coating Line (K002) & F-2 Corona Treater (OEPA Source #P004)

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>
F-2 Faustel 60-inch adhesive coating line with thermal oxidizer #2 & F-2 corona treater	OAC rule 3745-21-09(F) 40 CFR, Part 60, Subpart RR	2.9 lbs VOC per gallon of coating applied, excluding water and exempt solvents, on a daily volume-weighted average basis. 90% overall reduction of VOC, except for emulsion or silicon based coatings; 0.20 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month, when employing emulsion or silicon based coatings.

2. Additional Terms and Conditions

- 2.a The permittee shall install and maintain a permanent total enclosure, which complies with the requirements in 40 CFR 60, Reference Method 204, to capture the VOC emissions from this emissions unit.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

II. Operational Restrictions (continued)

2. This emissions unit shall be totally enclosed such that VOC emissions are captured and contained. 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 NDO's 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 NDO's shall be at least 3,600 m/hr (200 fpm). The direction of air flow through all NDO's 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.
 - e. All VOC emissions, except for those resulting from emulsion and/or silicon based coatings, must be captured and contained for discharge through a control device.
3. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, as a three-hour average, whenever the emissions unit is in operation.
4. The coating line shall be vented to the thermal oxidizer at all times and shall not vent through the bypass stack, except when employing emulsion or silicon based coatings.
5. The permittee shall properly maintain and operate the LEL units in the bypass stack, to ensure that waste streams from solvent based coatings do not go directly to the ambient air.
6. During the application of non-compliant surface coatings (that is during the required use of a thermal oxidizer with or without enclosure), the permittee shall ensure that any inline bypass that could divert solvent laden air from the abatement device associated with each coating applicator which complies with the applicable capture and control efficiency requirements, or complies with the overall control efficiency requirements contained in OAC 3745-21-09(B)(6), is closed.

In addition, any device in the bypass which indicates 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 manufacturer's recommendations, instructions and operating manuals.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal 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 monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, 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 emission unit was in compliance.
 - b. A log or record of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall install, calibrate, maintain and operate monitoring devices which continuously indicate that the total enclosure is operating properly. No continuous monitor shall be required if the permittee can demonstrate that the enclosure system is interlocked with the ovens' recirculation air system.

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

3. The permittee shall install, maintain and operate monitoring device(s) and a recorder which continuously and simultaneously measure and record the differential pressure between the inside and outside of the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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 daily the following information for the emulsion and silicon based coatings employed in this emissions unit:
 - a. the name and identification number of each coating applied;
 - b. the VOC content 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; and
 - c. the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for C_{voc} .
5. The permittee shall maintain a calendar month record of all coatings used and the results of Method 24 or any alternative compliance test method approved by the Ohio EPA for determining the VOC content of each coating.
6. The permittee shall inspect weekly all lines between the the total enclosure of the head of the coater and the thermal oxidizer for escaping VOC emissions and maintain records of the results in accordance with the 1998 Avery Dennison preventive maintenance plan.

IV. Reporting Requirements

1. For solvent based coating operations:

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, does not comply with the temperature limitation specified above.
 - b. Any incidences where the stack that bypasses the thermal incinerator is used while employing solvent based coatings.
2. The permittee shall notify the Northeast District Office of the Ohio EPA in writing of any daily record showing that the daily volume-weighted average VOC content of the emulsion and/or silicon based coatings exceeds the applicable limitation. 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 after the exceedance occurs.
 3. The permittee shall submit pressure differential deviation (excursion) reports that identify all three-hour blocks of time 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.

V. Testing Requirements

1. USEPA Method 24 shall be used to determine VOC content for all coatings and cleanup materials. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or an 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:

90% overall reduction by weight

Applicable Compliance Method: Performance testing in accordance with OAC rule 3745-21-10(C).

3. Emission Limitation:

For emulsion or silicon based coatings, 2.9 lbs VOC/gallon coating applied, excluding water and exempt solvents, on daily average volume- weighted basis.

Applicable Compliance Method:

Compliance shall be based on the record keeping in Section A.III.4.

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 2.5 years after the issuance of this permit and 6 months prior to permit renewal.

ii. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency limitation for VOC.

iii. The following test methods shall be employed to demonstrate compliance with the overall control efficiency 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 50 ppm; 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 appropriate Ohio EPA District Office or local air agency.

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.

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

- 4.c** Personnel from the appropriate Ohio EPA District Office or 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

- 1.** The 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.
- 2.** The permittee shall employ the plan for preventive maintenance and repair of leaks within the solvent capture and destruction system 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 cover.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F-2 Faustel 60-inch adhesive coating line with thermal oxidizer #2 & F-2 Corona treater	OAC Rule 3745-31-05 PTI 02-6981	8.90 pounds VOC/hr on a daily average basis; 39.0 tons VOC per year; 98.0 % overall VOC reduction by weight (100% capture and 98.0% destruction) for all coatings except emulsion and silicon based coatings;
	OAC rule 3745-31-05 PTI 02-7592	for emulsion and silicon based coatings, the VOC content shall not exceed 2.6 pounds VOC/gallon of coating, excluding water and exempt solvents, on a daily volume-weighted average basis 0.1 pound ozone per hour; and 0.44 ton per year

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information daily for all coatings and associated cleanup materials, except for emulsion and silicon based coatings:
 - a. The name and identification number of each coating, as applied.
 - b. The VOC content of each coating, excluding water and exempt solvents, as applied, in pounds per gallon.
 - c. The number of gallons of each coating employed, excluding water and exempt solvents.
 - d. The name and identification of each cleanup material employed.
 - e. The number of gallons of each cleanup material employed.
 - f. The VOC content of each cleanup material, in pounds per gallon.
 - g. The total uncontrolled VOC emissions from all coatings and from all cleanup materials employed, in pounds or tons.
 - h. The calculated, controlled VOC emission rate for all coatings, in pounds or tons (the controlled VOC emission rate for the coatings shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance) and the uncontrolled VOC emissions from all cleanup materials.
 - i. The total VOC emission rate while using solvent based coatings from this emissions unit including controlled VOC emissions from coatings plus uncontrolled emissions from cleanup materials.
2. The permittee shall collect and record the following information daily for all the emulsion and silicon based coatings and associated cleanup materials employed in this emissions unit:
 - a. The name and identification number of each coating applied.
 - b. The VOC content of each coating, excluding water and exempt solvents, as applied, in pounds per gallon.
 - c. The number of gallons of each coating employed, excluding water and exempt solvents.
 - d. The name and identification of each cleanup material employed.
 - e. The number of gallons of each cleanup material employed.
 - f. The VOC content of each cleanup material, in pounds per gallon.
 - g. The total VOC emissions from all coatings employed and from all coatings and cleanup materials employed, in pounds or tons.
 - h. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for Cvoc,2.
3. The permittee shall record the following information daily:
 - a. The total daily VOC emissions from this emissions unit, i.e., 1.i + 2.g.
 - b. The total operating hours of the coating line.
 - c. The average hourly VOC emission rate, in pounds/hr.

IV. Reporting Requirements

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

2. For emulsion or silicon based coatings:

The permittee shall notify the Northeast District Office of the Ohio EPA in writing of any daily record showing that the daily volume-weighted average VOC content for the emulsion and silicon based coatings exceeds the applicable limitation. 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.

3. The permittee shall submit deviation (excursion) reports which identify each day during which the average hourly VOC emissions exceeded 8.90 pounds per hour, and the actual average hourly VOC emissions for each such day.

V. Testing Requirements

1. Emission Limitation:

For emulsion or silicon based coatings, 2.6 lbs VOC/gallon coating applied, excluding water and exempt solvents, on daily volume-weighted average basis.

Applicable Compliance Method: Compliance shall be based on the record keeping in Section B.III.2 of these terms and conditions.

2. Emission Limitation:

98% overall VOC reduction by weight

Applicable Compliance Method: The permittee shall use the results of the emission tests required pursuant to section A.V.6 of this permit to demonstrate compliance with the above control efficiency limitation.

3. Emission Limitation:

8.90 lbs VOC/hr on a daily average basis

Applicable Compliance Method: Compliance shall be based on the record keeping requirements in Section B.III.1-3 of these terms and conditions.

4. Emission Limitation:

39.0 tons VOC per year

Applicable Compliance Method: Compliance shall be based on the record keeping requirements in Section B.III.1-3 of these terms and conditions.

V. Testing Requirements (continued)

5. Emission Limitation:

0.1 lb per hour ozone

Applicable Compliance Method:

Compliance shall be based on the following equation:

$$E = (0.014 \text{ lb ozone/kW}) \times (\text{maximum kW of input power for the corona treater})$$

where,

E = maximum lbs ozone emitted per hour

0.014 lb of ozone per kW is emission factor developed from emissions testing

6. Emission Limitation:

0.44 ton per year ozone

Applicable Compliance Method: Multiply the hourly emissions by the actual hours of operation per year and divide by 2000 (lbs/ton).

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: F-3 Coater (K003)

Activity Description: F-3 Coater - Adhesive Coating Line (K003) & F-3 Corona Treater

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>
F-3 adhesive coating line with thermal oxidizer #3 & F-3 corona treater	OAC rule 3745-21-09(F) 40 CFR, Part 60, Subpart RR	2.9 lbs VOC per gallon coating applied excluding water and exempt solvents, on a daily volume-weighted average basis. 90% overall reduction of VOC, except for emulsion or silicon based coating; 0.20 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month, when employing emulsion based coatings.

2. Additional Terms and Conditions

- 2.a The permittee shall install and maintain a permanent total enclosure, which complies with the requirements in 40 CFR 60, Reference Method 204, to capture the VOC emissions from this emissions unit.

II. Operational Restrictions

1. The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

II. Operational Restrictions (continued)

2. This emissions unit shall be totally enclosed such that VOC emissions are captured and contained. 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 NDO's 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 NDO's shall be at least 3,600 m/hr (200 fpm). The direction of air flow through all NDO's 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.
 - e. All VOC emissions, except for those resulting from emulsion and/or silicon based coatings, must be captured and contained for discharge through a control device.
3. The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inch of water, as a three-hour average, whenever the emissions unit is in operation.
4. The coating line shall be vented to the thermal oxidizer at all times and shall not vent through the bypass stack, except when employing emulsion or silicon based coatings.
5. The permittee shall properly maintain and operate the LEL units in the bypass stack, to ensure that waste streams from solvent based coatings do not go directly to the ambient air.
6. During the application of non-compliant surface coatings (that is during the required use of a thermal oxidizer with or without enclosure), the permittee shall ensure that any inline bypass that could divert solvent laden air from the abatement device associated with each coating applicator which complies with the applicable capture and control efficiency requirements, or complies with the overall control efficiency requirements contained in OAC 3745-21-09(B)(6), is closed.

In addition, any device in the bypass which indicates 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 manufacturer's recommendations, instructions and operating manuals.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal 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 monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, 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 emission unit was in compliance.
 - b. A log or record of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall install, calibrate, maintain and operate monitoring devices which continuously indicate that the total enclosure is operating properly. No continuous monitor shall be required if the permittee can demonstrate that the enclosure system is interlocked with the ovens' recirculation air system.

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

3. The permittee shall install, maintain and operate monitoring device(s) and a recorder which continuously and simultaneously measure and record the differential pressure between the inside and outside of the permanent total enclosure. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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 daily the following information for the emulsion and silicon based coatings employed in this emission unit:
 - a. the name and identification number of each coating applied;
 - b. the VOC content in pounds of VOC per gallon of coating, excluding water and exempt solvents, and the number of gallons, excluding water and exempt solvents of each coating, as applied;
 - c. the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for C_{voc} .
5. The permittee shall maintain a calendar month record of all coatings used and the results of Method 24 or any alternative compliance test method approved by the Ohio EPA for determining the VOC content of each coating.
6. The permittee shall inspect weekly and maintain records for all lines
The permittee shall inspect weekly all lines between the the total enclosure of the head of the coater and the thermal oxidizer for escaping VOC emissions and maintain records of the results in accordance with the 1998 Avery Dennison preventive maintenance plan.

IV. Reporting Requirements

1. For solvent based coating operations:

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

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, does not comply with the temperature limitation specified above.
 - b. Any incidences where the stack that bypasses the thermal incinerator is used while employing solvent based coatings.
2. The permittee shall notify the Northeast District Office of the Ohio EPA in writing of any daily record showing that the daily volume-weighted average VOC content of the emulsion and silicon based coatings exceeds the applicable limitation. 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 after the exceedance occurs.
 3. The permittee shall submit pressure differential deviation (excursion) reports that identify all three-hour blocks of time 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.

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:

90% overall reduction of VOC by weight

Applicable Compliance Method: Performance testing in accordance with OAC rule 3745-21-10(C).

3. Emission Limitation:

For emulsion or silicon based coatings, 2.9 lbs VOC/gallon coating applied, excluding water and exempt solvents, based on a daily volume- weighted average.

Applicable Compliance Method:

Compliance shall be based on the record keeping in Section A.III.4.

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 2.5 years after the issuance of this permit and 6 months prior to permit renewal.

ii. The emission testing shall be conducted to demonstrate compliance with the overall control efficiency of for VOC.

iii. The following test method shall be employed to demonstrate compliance with the overall control efficiency limitation 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 50 ppm; 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 appropriate Ohio EPA District Office or local air agency.

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.

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

- 4.c** Personnel from the appropriate Ohio EPA District Office or 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

- 1.** The 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.
- 2.** The permittee shall employ the plan for preventive maintenance and repair of leaks within the solvent capture and destruction system 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 cover.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F-3 adhesive coating line with thermal oxidizer & F-3 corona treater	OAC Rule 3745-31-05 PTI 02-9533	21.73 pounds VOC/hr on a daily average basis; 95.18 tons VOC per year; 98.3 % overall VOC reduction by weight (100% capture and 98.3% destruction) for all coatings except emulsion and silicon based coatings; for emulsion and silicon based coatings, the VOC content shall not exceed 2.6 pounds VOC/gallon of coating, excluding water and exempt solvents, on a daily volume-weighted average basis

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information daily for all coatings and associated cleanup materials, except for emulsion and silicon based coatings:
 - a. The name and identification number of each coating, as applied.
 - b. The VOC content of each coating, excluding water and exempt solvents, as applied, in pounds per gallon.
 - c. The number of gallons of each coating employed, excluding water and exempt solvents.
 - d. The name and identification of each cleanup material employed.
 - e. The number of gallons of each cleanup material employed.
 - f. The VOC content of each cleanup material, in pounds per gallon.
 - g. The total uncontrolled VOC emissions from all coatings and from all cleanup materials employed, in pounds or tons.
 - h. The calculated, controlled VOC emission rate for all coatings, in pounds or tons (the controlled VOC emission rate for the coatings shall be calculated using the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance) and the uncontrolled emissions from all cleanup materials.
 - i. The total VOC emission rate while using solvent based coatings from this emissions unit including controlled VOC emissions from coatings plus uncontrolled emissions from cleanup materials.
2. The permittee shall collect and record the following information daily for all the emulsion and silicon based coatings employed in this emissions unit:
 - a. The name and identification number of each coating applied.
 - b. The VOC content of each coating, as applied, excluding water and exempt solvents, as applied, in pounds per gallon.
 - c. The number of gallons of each coating employed, excluding water and exempt solvents.
 - d. The name and identification of each cleanup material employed.
 - e. The number of gallons of each cleanup material employed.
 - f. The VOC content of each cleanup material, in pounds per gallon.
 - g. The total VOC emissions from all coatings employed and from all coatings and cleanup materials employed, in pounds or tons.
 - h. The daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for Cvoc,2.
3. The permittee shall record the following information daily:
 - a. The total daily VOC emissions from this emissions unit, i.e., 1.i + 2.g.
 - b. The total operating hours of the coating line.
 - c. The average hourly VOC emission rate, in pounds/hr.

IV. Reporting Requirements

1. The permittee shall also submit annual reports which specify the total VOC emissions from this emissions unit. These reports shall be submitted by January 31 of each year.
2. For emulsion and silicon based coatings:

The permittee shall notify the Northeast District Office of the Ohio EPA in writing of any daily record showing that the daily volume-weighted average VOC content for the emulsion and silicon based coatings exceeds the applicable limitation. 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.

3. The permittee shall submit deviation (excursion) reports which identify each day during which the average hourly VOC emissions exceeded 21.73 pounds per hour, and the actual average hourly VOC emissions for each such day.

V. Testing Requirements

1. Emission Limitation:

For emulsion or silicon based coatings, 2.6 lbs VOC/gallon coating applied, excluding water and exempt solvents, on a daily average volume weighted basis.

Applicable Compliance Method: Compliance shall be based on the record keeping requirements in Section B.III.2 of these terms and conditions.

2. Emission Limitation:

98.3% overall VOC reduction by weight (100% capture and 98.3% destruction)

Applicable Compliance Method: The permittee shall use the results of the emission tests required pursuant to section A.V.6 of these terms and conditions to demonstrate compliance with the above control limitation.

3. Emission Limitation:

21.73 lbs VOC/hr on a daily average basis

Applicable Compliance Method: Compliance shall be based on the record keeping requirements in Section B.III.1-3 of these terms and conditions.

4. Emission Limitation:

95.18 tons VOC per year

Applicable Compliance Method: Compliance shall be based on the record keeping requirements in Section B.III.1-3 of these terms and conditions.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Churn Cleaner (P001)
Activity Description: 670-1 Churn Washer/Solvent Reclaim 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>
670-1 Churn Washer/Solvent Reclaim Unit	OAC rule 3745-21-07(G)(2)	8 pounds per hour and 40 pounds per day of organic compounds, see A.2.a

2. Additional Terms and Conditions

- 2.a Monitoring and/or record keeping requirements for organic compounds are not required by this permit. Based on the maximum capacity of the equipment and an estimate of OC emissions based upon AP-42, Section 4.8, Tank and Drum Cleaning, the actual organic compound emissions could not exceed the allowable emission rates from this rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

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>
670-1 Churn Washer/Solvent Reclaim Unit	OAC rule 3745-31-05 PTI 02-7431	1.4 pounds of VOC per hour; 33.6 pounds of VOC per day; 6.13 tons of VOC per year

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each day the churn washers operate:
 - a. The company identification of the liquid organic materials used.
 - b. The number of cycles of operation.
 - c. The number of hours of operation.
 - d. An estimate of the daily VOC emission rate, in pounds.
 - e. The average hourly VOC emission rate, in pounds, i.e., d/c.
2. The permittee shall keep the following records each day the solvent distillation unit operates:
 - a. The company identification of each liquid organic material used.
 - b. The amount of each solvent processed in gallons.
 - c. The number of hours of operation.
 - d. An estimate of the daily VOC emission rate, in pounds.
 - e. The average hourly VOC emission rate, in pounds, i.e., d/c.
3. The permittee shall keep the following records each day this emissions unit operates:
 - a. An estimate of the total daily VOC emission rate (pounds), by summing the emissions from the churn washers and the distillation unit.
 - b. An estimate of the total average hourly VOC emission rate (pounds), by summing the average hourly VOC emission rate from the churn washers and from the distillation unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each day during which the average hourly VOC emissions exceeded 1.4 pounds per hour, and the actual average hourly VOC emissions for each such day.
 - b. An identification of each day during which the VOC emissions exceeded 33.6 pounds per day, and the actual VOC emissions for each such day.
2. 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.

V. Testing Requirements

1. Emission Limitation:
33.6 lbs VOC per day

Applicable Compliance Method:

To determine the actual emission rate for volatile organic compounds, the following equations shall be used:

1.a $E_c = N \times 0.142 \text{ lb VOC/cycle}$

where

E_c = VOC emission rate (lbs/day) from the churns

0.142 = emission factor (lb VOC/cycle), based on the AP-42, Table 4.8-2 emission factor for tank truck cleaning and a maximum solvent usage of 120 gallons per cycle.

N = number of cleaning cycles per day

1.b $E_d = V \times 7.11 \text{ lbs/gal} \times 1/2000 \text{ tn/lbs} \times 0.74 \text{ lb VOC/ton}$

where,

E_d = VOC emission rate (lbs/day) from the solvent distillation unit

V = number of gallons of solvent processed through the distillation unit each day

7.11 = average density of solvent processed through the distillation unit

0.74 = emission factor from AP-42 Table 4.7-1 for waste solvent reclaiming (storage tank vent and loading)

1.c $E_t = E_c + E_d$

where

E_t = VOC emission rate (lbs/day) from churns and distillation unit

E_c = VOC emission rate (lbs/day) from churns, determined above

E_d = VOC emission rate (lbs/day) from solvent distillation unit, determined above

V. Testing Requirements (continued)

2. Emission Limitation:
1.4 lbs organic compounds per hour

Applicable Compliance Method:

To determine the average actual emission rate for organic compounds, the following equation shall be used:

$$E_h = E_c/H_c + E_d/H_c$$

where

E_h = average organic compound emission rate (lbs/hr)

E_c = VOC emission rate (lbs/day) from the churns, determined in B.V.1.

E_d = VOC emission rate (lbs/day) from the distillation unit, determined in B.V.1.

H_c = hours of operation per day for the churns

H_d = hours of operation per day for the distillation unit

3. Emission Limitation:

6.13 tons per year

Applicable Compliance Method:

Sum the total daily VOC emissions determined by the record keeping in section B.III and divide by 2000 (pounds/ton).

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mixer (P006)
Activity Description: 670-5 50-HP Compounding Mixer

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>
670-5 50-HP Compounding Mixer	OAC rule 3745-21-07(G)(2)	8 pounds per hour and 40 pounds per day of organic compounds, see A.2.a

2. Additional Terms and Conditions

- 2.a Monitoring and/or record keeping requirements for organic compounds are not required by this permit. Based on the maximum capacity of the equipment and an estimate of OC emissions from AP-42, Section 4.6 on solvent degreasing, the actual organic compound emissions could not exceed the allowable emission rates from this rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

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>
670-5 50-HP compounding mixer	OAC 3745-31-05 PTI 02-7431	1.19 pounds per hour VOC 28.56 pounds per day VOC 5.21 tons per year VOC

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following records each day the compounding mixer operates:
 - a. The total number of batches operated.
 - b. The total number of batches in open top drums.
 - c. The total number of batches in churns.
 - d. An estimate of the daily VOC emission rate, in pounds.
 - e. The number of hours of operation.
 - f. The average hourly VOC emissions, in pounds per hour.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each day during which the hourly VOC emissions exceeded 1.19 pounds per hour, and the actual hourly VOC emissions for each such day.
 - b. An identification of each day during which the VOC emissions exceeded 28.56 pounds per day, and the actual VOC emissions for each such day.
2. 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.

V. Testing Requirements

1. Emission Limitation: 28.56 lbs VOC per day

Applicable Compliance Method: To determine the emission factor, this mixer was treated as a cold cleaner with agitation. The emission factor, derived using AP-42, 5th edition, 1981, section 4.6 on Solvent Degreasing, and adding a 50% increment to allow for agitation, is 0.12 lb/hr-ft².

The daily VOC emissions are calculated by the following:

$$(0.12 \text{ lb/hr-ft}^2) \times (1 \text{ hr/batch}) \times (\text{Number of batches for open-top drum}) \times (3.69 \text{ ft}^2) + (0.12 \text{ lb/hr-ft}^2) \times (1 \text{ hr/batch}) \times (\text{Number of batches for portable churn}) \times (12.57 \text{ ft}^2)$$

where, the open-top drums with a diameter of 26 inches and surface area of 3.69 ft² and portable churns with a diameter of 48 inches and surface area of 12.57 ft² are used.

2. Emission limitation: 1.19 lbs VOC per hour.

Applicable compliance method: Compliance shall be based on the record keeping specified in Section B.III.1 of these terms and conditions.

3. Emission Limitation:

5.21 tons per year

Applicable Compliance Method: Sum the total daily VOC emissions determined by the record keeping in section B.III.1 and divide by 2000 (pounds/ton).

VI. Miscellaneous Requirements

None

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