



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

06/22/00

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

04-48-01-0075
Textileather Corporation
Michael L. Gregory
3729 Twining Street
P.O. Box 875
Toledo, OH 43608-1315

Dear Michael L. Gregory:

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 Toledo Div of Environmental Services 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 Toledo Div of Environmental Services.

Very truly yours,

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

cc: USEPA
Jim Orlemann, DAPC Engineering
Michael Ahern, DAPC PMU
Toledo Div of Environmental Services
Indiana
Michigan



Ohio EPA

State of Ohio Environmental Protection Agency

TITLE V PERMIT

Issue Date: 06/22/00

DRAFT

Effective Date:

Expiration Date:

This document constitutes issuance to:

Textileather Corporation
3729 Twining Street
P. O. Box 875
Toledo, OH 43608-1315

of a Title V permit for Facility ID: 04-48-01-0075

Emissions Unit ID (Company ID)/

Emissions Unit Activity Description:

B001 (No. 1 Boiler)

No. 1 Boiler - Process steam and heat

B002 (No. 2 Boiler)

No. 2 Boiler - Process steam and heat

K001 (No. 16 P/F Machine)

No. 16 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

K004 (No. 18 P/F Machine)

No. 18 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

K005 (No. 21 P/F Machine)

No. 21 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

K006 (No. 22 P/F Machine)

No. 22 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

K007 (No. 23 P/F Machine)

No. 23 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

K008 (No. 24 P/F Machine)

No. 24 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

K009 (No. 25 P/F Machine)

No. 25 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

K010 (No. 26 P/F Machine)
No. 26 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

K011 (No. 28 P/F Machine)
No. 28 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

K012 (No. 2 Calendering Line)
No.2 Calendering Line

K013 (No. 3 Calendering Line)
No.3 Calendering Line

P014 (No. 41 Plastisol Line)
No. 41 Plastisol Line with Electrostatic Precipitator

P018 (No. 51 Plastisol Line)
No. 51 Plastisol Line with Incinerator

Z001 (Bulk Handling System)
Bulk Handling System

Z003 (Ribbon Blenders / Banbury Mixers)
Ribbon Blenders and Banbury Mixers for Calendering System

Z004 (Plastisol Line 41 De-bagging)
PVC Resin De-Bagging Operation - Plastisol Line No. 41

Z005 (Plastisol Line 51 De-bagging)
PVC Resin De-Bagging Operation - Plastisol Line No. 51

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:

Toledo Div of Environmental Services
348 South Erie Street
Toledo, OH 43602-1633
(419) 936-3015

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:

B004 - #3 calendar oil heater
K003 - pilot line
P003 - embossing line
T001 - tank #1: 10,000-gallon plasticizer above ground storage
T002 - tank #2: 10,000-gallon plasticizer above ground storage
T003 - tank #3: 10,000-gallon plasticizer above ground storage
T006 - tank #6: 20,000-gallon plasticizer above ground storage
T007 - tank #7: 20,000-gallon plasticizer above ground storage
T008 - tank #8: 20,000-gallon plasticizer above ground storage
T009 - tank #22: 20,000-gallon plasticizer above ground storage
T010 - tank #23: 20,000-gallon plasticizer above ground storage
T011 - tank #13: 10,000-gallon double wall horizontal MEK/THF under ground storage
T012 - tank #12: 10,000-gallon double wall horizontal MEK/THF under ground storage
T013 - tank #18: 10,000-gallon double wall horizontal MEK under ground storage
T016 - tank #11: 10,000-gallon double wall horizontal MEK under ground storage
T017 - tank #17: 10,000-gallon double wall horizontal MEK under ground storage
T018 - tank #16: 10,000-gallon double wall horizontal THF under ground storage
T026 - tank #26: 10,000-gallon plasticizer above ground storage
T027 - tank #27: 10,000-gallon plasticizer above ground storage
Z006 - 8,000-gallon #2 fuel oil tank
Z007 - 300,000-gallon #2 fuel oil tank
Z008 - stabilizer hand loading station: calendaring
Z009 - resin drop points: calendaring
Z010 - antimony trioxide station: calendaring
Z011 - PVC addition hopper #1: calendaring
Z012 - PVC addition hopper #2: calendaring
Z013 - plasticizer mix/addition area: calendaring
Z014 - PVC/filler recycling station: calendaring
Z015 - silo shaker
Z016 - annealer
Z017 - cold cleaning tank #1
Z018 - cold cleaning tank #2
Z019 - 2 drum curing ovens
Z020 - 2 lab hoods: quality labs
Z021 - vacuum former: quality lab
Z022 - 5 ovens: quality lab
Z023 - 5 lab hoods: R&D lab #1
Z024 - 4 mini print machines: R&D lab #1
Z025 - mini calendar: R&D lab #1

B. State Only Enforceable Section (continued)

- Z026 - 2 mini mills: R&D lab #1
- Z027 - oven: R&D lab #1
- Z028 - oven: R&D lab #2
- Z029 - 3 lab hoods: R&D lab #2
- Z030 - sample prep table with hood: R&D lab #2
- Z031 - print and finish color matching test hood (QA/QC)
- Z032 - Hydro-Tek distillation still
- Z033 - soup room weight scale
- Z034 - facility drum mixers
- Z035 - 800-gallon colored plastisol tank #1: by plastisol line
- Z036 - 800-gallon colored plastisol tank #2: by plastisol line
- Z037 - 800-gallon colored plastisol tank #3: by plastisol line
- Z038 - 800-gallon colored plastisol tank #4: by plastisol line
- Z039 - 800-gallon colored plastisol tank #5: by plastisol line
- Z040 - 800-gallon colored plastisol tank #6: by plastisol line
- Z041 - 1,750-gallon colored plastisol tank #17: by large mixer
- Z042 - 1,550-gallon colored plastisol tank #18: by large mixer
- Z043 - 1,550-gallon colored plastisol tank #19: by large mixer
- Z044 - 750-gallon oil plasticizer tank #11332: new dope room
- Z045 - 750-gallon oil plasticizer tank #11331: new dope room
- Z046 - 1,050-gallon product 037 or 450 tank #11335: new dope room
- Z047 - 1,050-gallon product 037 or 450 tank #11336: new dope room
- Z048 - 2,150-gallon foam tank #11328: new dope room
- Z049 - 2,150-gallon skin tank #11325: new dope room
- Z050 - 1,500-gallon foam surge tank #11324: new dope room
- Z051 - 1,500-gallon skin surge tank #11322: new dope room
- Z052 - 5,600-gallon oil plasticizer 52338 tank #11320: new dope room
- Z053 - 1,350-gallon BFN tank #11317: new dope room
- Z054 - 3,350-gallon pigmented foam tank #11301: new tank area
- Z055 - 3,350-gallon pigmented foam tank #11302: new tank area
- Z056 - 3,350-gallon pigmented foam tank #11303: new tank area
- Z057 - 3,350-gallon pigmented foam tank #11304: new tank area
- Z058 - 3,350-gallon pigmented foam tank #11305: new tank area
- Z059 - 3,350-gallon pigmented foam tank #11306: new tank area
- Z060 - 3,350-gallon pigmented foam tank #11307: new tank area

B. State Only Enforceable Section (continued)

- Z061 - 3,350-gallon pigmented foam tank #11308: new tank area
- Z062 - 3,350-gallon pigmented foam tank #11309: new tank area
- Z063 - 3,350-gallon clear skin tank #11310: new tank area
- Z064 - 3,350-gallon pigmented foam tank #11311: new tank area
- Z065 - 3,350-gallon clear skin tank #11312: new tank area
- Z066 - 3,350-gallon pigmented foam tank #11313: new tank area
- Z067 - 3,350-gallon clear skin tank #11314: new tank area
- Z068 - 3,350-gallon pigmented foam tank #11315: new tank area
- Z069 - 3,350-gallon clear skin tank #11316: new tank area
- Z070 - 1,250-gallon clear plastisol tank #43: plastisol dope room
- Z071 - 1,350-gallon BFN tank #44: plastisol dope room
- Z072 - 750-gallon BFN tank #45: plastisol dope room
- Z073 - 1,200-gallon BFN tank #46: plastisol dope room
- Z074 - 1,950-gallon clear plastisol tank #100: plastisol dope room
- Z075 - 1,950-gallon clear plastisol tank #101: plastisol dope room
- Z076 - 1,950-gallon clear plastisol tank #102: plastisol dope room
- Z077 - 1,950-gallon clear plastisol tank #103: plastisol dope room
- Z078 - 1,950-gallon clear plastisol tank #104: plastisol dope room
- Z079 - 1,950-gallon clear plastisol tank #105: plastisol dope room
- Z080 - 1,950-gallon clear plastisol tank #106: plastisol dope room
- Z081 - 1,950-gallon clear plastisol tank #107: plastisol dope room
- Z082 - 1,950-gallon clear plastisol tank #108: plastisol dope room
- Z083 - 1,950-gallon clear plastisol tank #109: plastisol dope room
- Z084 - 1,950-gallon clear plastisol tank #110: plastisol dope room
- Z085 - 1,850-gallon clear plastisol tank #111: plastisol dope room
- Z086 - 1,200-gallon pigment tank #21302: plastisol dope room
- Z087 - 800-gallon BFN tank #21388: bulk dope room
- Z088 - 1,300-gallon tank #21354: bulk dope room
- Z089 - 1,300-gallon tank #21353: bulk dope room
- Z090 - 1,600-gallon foams/skins tank #213138: bulk dope room
- Z091 - 1,150-gallon foams/skins tank #21390: bulk dope room

B. State Only Enforceable Section (continued)

- Z092 - 1,400-gallon BFN tank #21351: bulk dope room
- Z093 - 1,550-gallon skin tank #21395: bulk dope room
- Z094 - 1,550-gallon foam mixer tank: bulk dope room
- Z095 - 550-gallon clear plastisol #21382: bulk dope room
- Z096 - 550-gallon clear plastisol tank #21381: bulk dope room
- Z097 - 3,250-gallon tank #21384: bulk dope room
- Z098 - 3,200-gallon tank #21385: bulk dope room
- Z099 - 750-gallon tank #659: bulk dope room
- Z104 - 750-gallon clear vinyl tank #11: soup room
- Z105 - 750-gallon clear vinyl tank #12: soup room
- Z106 - 750-gallon clear vinyl tank #13: soup room
- Z107 - 750-gallon clear vinyl tank #14: soup room
- Z108 - 750-gallon clear vinyl tank #15: soup room
- Z109 - 750-gallon clear vinyl tank #16: soup room
- Z110 - 750-gallon clear vinyl tank #17: soup room
- Z111 - 750-gallon clear vinyl tank #18: soup room
- Z112 - 750-gallon clear vinyl tank #19: soup room
- Z113 - 750-gallon clear vinyl tank #20: soup room
- Z114 - 750-gallon clear vinyl tank #21: soup room
- Z115 - 1,150-gallon clear vinyl tank #24: soup room
- Z116 - 1,150-gallon clear vinyl tank #25: soup room
- Z117 - 750-gallon clear vinyl tank #26: soup room
- Z118 - 750-gallon clear vinyl tank #27: soup room
- Z119 - 1,150-gallon clear vinyl tank #28: soup room
- Z120 - 150-gallon clear vinyl (MT) tank: soup room
- Z121 - 300-gallon silicone/tolulene tank #21209: soup room
- Z122 - 1,100-gallon Hydro-Tek distillation system scrap ink tank
- Z123 - 2 ovens: R&D lab #2
- Z124 - Despatch oven: Development Center
- Z125 - lab hood: Development Center
- Z126 - brabender: Development Center
- Z127 - pigment mixing operations

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: No. 1 Boiler (B001)
Activity Description: No. 1 Boiler - Process steam and heat

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>
78 mmBtu boiler fired with natural gas, LPG, or #2 fuel oil	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(K)	1.0 pound of sulfur dioxide per million Btu of actual heat input when burning #2 fuel oil

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

II. Operational Restrictions

1. The permittee shall burn only natural gas, LPG, or #2 fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall meet, on an "as received" basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.0 pound of sulfur dioxide per million Btu of actual heat input. Compliance with this specification shall be determined by using the weighted, arithmetic average of the analytical results provided by the permittee or oil supplier for all shipments of oil during each calendar month.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG and/or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
3. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include an identification of each day when a fuel other than natural gas, LPG, and/or #2 fuel oil was burned in this emissions unit.
2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted* average sulfur dioxide emission rate (lb/mmBtu) for the oil received during the calendar month; and
 - c. the weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*in proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

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

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with OAC rule 3745-17-03(B)(1).
 - 1.b Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this limitation in accordance with the method(s) and procedures specified in OAC rule 3745-17-03(B)(9).
 - 1.c Emission Limitation:

1.0 pound of sulfur dioxide per million Btu of actual heat input when burning #2 fuel oil

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements specified in section A.III. If required, the permittee shall demonstrate compliance with this limitation in accordance with the method(s) and procedures specified in OAC rule 3745-18-04(E).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 Boiler (B002)
Activity Description: No. 2 Boiler - Process steam and heat

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>
78 mmBtu boiler fired with natural gas, LPG, or #2 fuel oil	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.
	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions per million Btu of actual heat input
	OAC rule 3745-18-54(K)	1.0 pound of sulfur dioxide per million Btu of actual heat input when burning #2 fuel oil

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

II. Operational Restrictions

1. The permittee shall burn only natural gas, LPG, or #2 fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall meet, on an "as received" basis, a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.0 pound of sulfur dioxide per million Btu of actual heat input. Compliance with this specification shall be determined by using the weighted, arithmetic average of the analytical results provided by the permittee or oil supplier for all shipments of oil during each calendar month.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG and/or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.
3. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include an identification of each day when a fuel other than natural gas, LPG, and/or #2 fuel oil was burned in this emissions unit.
2. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. the total quantity of oil received in each shipment (gallons);
 - b. the weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and
 - c. the weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*in proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

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

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with OAC rule 3745-17-03(B)(1).
 - 1.b Emission Limitation:

0.020 pound of particulate emissions per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this limitation in accordance with the method(s) and procedures specified in OAC rule 3745-17-03(B)(9).
 - 1.c Emission Limitation:

1.0 pound of sulfur dioxide per million Btu of actual heat input when burning #2 fuel oil

Applicable Compliance Method:

Compliance shall be demonstrated through the record keeping requirements specified in section A.III. If required, the permittee shall demonstrate compliance with this limitation in accordance with the method(s) and procedures specified in OAC rule 3745-18-04(E).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 16 P/F Machine (K001)

Activity Description: No. 16 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
- 2.b The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating applications stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- 2.c The permittee shall operate and maintain a carbon adsorption system with at least 8,000 cubic feet per minute more carbon adsorption capacity than the capacity existing on May 11, 1987 and shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.

II. Operational Restrictions (continued)

2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, deviation (excursion) reports which identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorbers exceeded the concentration limitation specified above. These quarterly reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

1. When required, compliance with the capture efficiency and control efficiency limitations for VOC shall be determined in accordance with OAC rule 3745-21-10(B) and (C), with adjustments for solvent retained in the product, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

V. Testing Requirements (continued)

- a. Control efficiency testing shall be conducted within 6 months of permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- b. Capture efficiency testing shall be conducted within 6 months of permit issuance and within 6 months prior to permit expiration.
- c. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
- d. The test(s) shall be conducted while all of the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 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 USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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).

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.

3. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour in duration each, under the same operating conditions and while producing three (3) different products:
 - a. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - b. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - c. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 or 25A, in the final oven exhaust directed to the VOC control system from the line tested during the period of the run; and
 - d. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run.

V. Testing Requirements (continued)

4. During the capture efficiency testing, the permittee also shall determine the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

- a. Obtaining Sample

Eight 3/16" diameter samples are died out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

- b. Solvent Determination

- i. Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

- ii. Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

- c. Calculation - From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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: No. 18 P/F Machine (K004)

Activity Description: No. 18 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
- 2.b The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating applications stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- 2.c The permittee shall operate and maintain a carbon adsorption system with at least 8,000 cubic feet per minute more carbon adsorption capacity than the capacity existing on May 11, 1987 and shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.

II. Operational Restrictions (continued)

2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, deviation (excursion) reports which identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorbers exceeded the concentration limitation specified above. These quarterly reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

1. When required, compliance with the capture efficiency and control efficiency limitations for VOC shall be determined in accordance with OAC rule 3745-21-10(B) and (C), with adjustments for solvent retained in the product, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

V. Testing Requirements (continued)

- a. Control efficiency testing shall be conducted within 6 months of permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- b. Capture efficiency testing shall be conducted within 6 months of permit issuance and within 6 months prior to permit expiration.
- c. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
- d. The test(s) shall be conducted while all of the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 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 USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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).

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.

3. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour in duration each, under the same operating conditions and while producing three (3) different products:
 - a. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - b. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - c. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 or 25A, in the final oven exhaust directed to the VOC control system from the line tested during the period of the run; and
 - d. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run.

V. Testing Requirements (continued)

4. During the capture efficiency testing, the permittee also shall determine the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

- a. Obtaining Sample

Eight 3/16" diameter samples are died out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

- b. Solvent Determination

- i. Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

- ii. Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

- c. Calculation - From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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: No. 21 P/F Machine (K005)

Activity Description: No. 21 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
- 2.b The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating applications stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- 2.c The permittee shall operate and maintain a carbon adsorption system with at least 8,000 cubic feet per minute more carbon adsorption capacity than the capacity existing on May 11, 1987 and shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.

II. Operational Restrictions (continued)

2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, deviation (excursion) reports which identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorbers exceeded the concentration limitation specified above. These quarterly reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

1. When required, compliance with the capture efficiency and control efficiency limitations for VOC shall be determined in accordance with OAC rule 3745-21-10(B) and (C), with adjustments for solvent retained in the product, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

V. Testing Requirements (continued)

- a. Control efficiency testing shall be conducted within 6 months of permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- b. Capture efficiency testing shall be conducted within 6 months of permit issuance and within 6 months prior to permit expiration.
- c. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
- d. The test(s) shall be conducted while all of the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 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 USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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).

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.

3. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour in duration each, under the same operating conditions and while producing three (3) different products:
 - a. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - b. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - c. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 or 25A, in the final oven exhaust directed to the VOC control system from the line tested during the period of the run; and
 - d. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run.

V. Testing Requirements (continued)

4. During the capture efficiency testing, the permittee also shall determine the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

- a. Obtaining Sample

Eight 3/16" diameter samples are died out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

- b. Solvent Determination

- i. Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

- ii. Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

- c. Calculation - From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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: No. 22 P/F Machine (K006)

Activity Description: No. 22 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
- 2.b The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating applications stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- 2.c The permittee shall operate and maintain a carbon adsorption system with at least 8,000 cubic feet per minute more carbon adsorption capacity than the capacity existing on May 11, 1987 and shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.

II. Operational Restrictions (continued)

2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, deviation (excursion) reports which identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorbers exceeded the concentration limitation specified above. These quarterly reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

1. When required, compliance with the capture efficiency and control efficiency limitations for VOC shall be determined in accordance with OAC rule 3745-21-10(B) and (C), with adjustments for solvent retained in the product, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

V. Testing Requirements (continued)

- a. Control efficiency testing shall be conducted within 6 months of permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- b. Capture efficiency testing shall be conducted within 6 months of permit issuance and within 6 months prior to permit expiration.
- c. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
- d. The test(s) shall be conducted while all of the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 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 USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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).

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.

3. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour in duration each, under the same operating conditions and while producing three (3) different products:
 - a. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - b. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - c. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 or 25A, in the final oven exhaust directed to the VOC control system from the line tested during the period of the run; and
 - d. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run.

V. Testing Requirements (continued)

4. During the capture efficiency testing, the permittee also shall determine the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

- a. Obtaining Sample

Eight 3/16" diameter samples are died out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

- b. Solvent Determination

- i. Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

- ii. Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

- c. Calculation - From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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: No. 23 P/F Machine (K007)

Activity Description: No. 23 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
- 2.b The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating applications stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- 2.c The permittee shall operate and maintain a carbon adsorption system with at least 8,000 cubic feet per minute more carbon adsorption capacity than the capacity existing on May 11, 1987 and shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.

II. Operational Restrictions (continued)

2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, deviation (excursion) reports which identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorbers exceeded the concentration limitation specified above. These quarterly reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

1. When required, compliance with the capture efficiency and control efficiency limitations for VOC shall be determined in accordance with OAC rule 3745-21-10(B) and (C), with adjustments for solvent retained in the product, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

V. Testing Requirements (continued)

- a. Control efficiency testing shall be conducted within 6 months of permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- b. Capture efficiency testing shall be conducted within 6 months of permit issuance and within 6 months prior to permit expiration.
- c. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
- d. The test(s) shall be conducted while all of the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 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 USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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).

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.

3. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour in duration each, under the same operating conditions and while producing three (3) different products:
 - a. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - b. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - c. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 or 25A, in the final oven exhaust directed to the VOC control system from the line tested during the period of the run; and
 - d. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run.

V. Testing Requirements (continued)

4. During the capture efficiency testing, the permittee also shall determine the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

- a. Obtaining Sample

Eight 3/16" diameter samples are died out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

- b. Solvent Determination

- i. Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

- ii. Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

- c. Calculation - From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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: No. 24 P/F Machine (K008)

Activity Description: No. 24 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
- 2.b The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating applications stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- 2.c The permittee shall operate and maintain a carbon adsorption system with at least 8,000 cubic feet per minute more carbon adsorption capacity than the capacity existing on May 11, 1987 and shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.

II. Operational Restrictions (continued)

2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, deviation (excursion) reports which identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorbers exceeded the concentration limitation specified above. These quarterly reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

1. When required, compliance with the capture efficiency and control efficiency limitations for VOC shall be determined in accordance with OAC rule 3745-21-10(B) and (C), with adjustments for solvent retained in the product, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

V. Testing Requirements (continued)

- a. Control efficiency testing shall be conducted within 6 months of permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- b. Capture efficiency testing shall be conducted within 6 months of permit issuance and within 6 months prior to permit expiration.
- c. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
- d. The test(s) shall be conducted while all of the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 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 USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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).

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.

3. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour in duration each, under the same operating conditions and while producing three (3) different products:
 - a. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - b. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - c. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 or 25A, in the final oven exhaust directed to the VOC control system from the line tested during the period of the run; and
 - d. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run.

V. Testing Requirements (continued)

4. During the capture efficiency testing, the permittee also shall determine the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

- a. Obtaining Sample

Eight 3/16" diameter samples are died out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

- b. Solvent Determination

- i. Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

- ii. Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

- c. Calculation - From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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: No. 25 P/F Machine (K009)

Activity Description: No. 25 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
- 2.b The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating applications stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- 2.c The permittee shall operate and maintain a carbon adsorption system with at least 8,000 cubic feet per minute more carbon adsorption capacity than the capacity existing on May 11, 1987 and shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.

II. Operational Restrictions (continued)

2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, deviation (excursion) reports which identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorbers exceeded the concentration limitation specified above. These quarterly reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

1. When required, compliance with the capture efficiency and control efficiency limitations for VOC shall be determined in accordance with OAC rule 3745-21-10(B) and (C), with adjustments for solvent retained in the product, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

V. Testing Requirements (continued)

- a. Control efficiency testing shall be conducted within 6 months of permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- b. Capture efficiency testing shall be conducted within 6 months of permit issuance and within 6 months prior to permit expiration.
- c. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
- d. The test(s) shall be conducted while all of the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 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 USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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).

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.

3. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour in duration each, under the same operating conditions and while producing three (3) different products:
 - a. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - b. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - c. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 or 25A, in the final oven exhaust directed to the VOC control system from the line tested during the period of the run; and
 - d. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run.

V. Testing Requirements (continued)

4. During the capture efficiency testing, the permittee also shall determine the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

- a. Obtaining Sample

Eight 3/16" diameter samples are died out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

- b. Solvent Determination

- i. Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

- ii. Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

- c. Calculation - From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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: No. 26 P/F Machine (K010)

Activity Description: No. 26 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
- 2.b The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating applications stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- 2.c The permittee shall operate and maintain a carbon adsorption system with at least 8,000 cubic feet per minute more carbon adsorption capacity than the capacity existing on May 11, 1987 and shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.

II. Operational Restrictions (continued)

2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, deviation (excursion) reports which identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorbers exceeded the concentration limitation specified above. These quarterly reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

1. When required, compliance with the capture efficiency and control efficiency limitations for VOC shall be determined in accordance with OAC rule 3745-21-10(B) and (C), with adjustments for solvent retained in the product, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

V. Testing Requirements (continued)

- a. Control efficiency testing shall be conducted within 6 months of permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- b. Capture efficiency testing shall be conducted within 6 months of permit issuance and within 6 months prior to permit expiration.
- c. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
- d. The test(s) shall be conducted while all of the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 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 USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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).

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.

3. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour in duration each, under the same operating conditions and while producing three (3) different products:
 - a. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - b. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - c. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 or 25A, in the final oven exhaust directed to the VOC control system from the line tested during the period of the run; and
 - d. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run.

V. Testing Requirements (continued)

4. During the capture efficiency testing, the permittee also shall determine the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

- a. Obtaining Sample

Eight 3/16" diameter samples are died out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

- b. Solvent Determination

- i. Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

- ii. Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

- c. Calculation - From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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: No. 28 P/F Machine (K011)

Activity Description: No. 28 Print and Finish Machine with Carbon Adsorption Solvent Recovery System

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>
print and finish machine with carbon adsorption	OAC rule 3745-21-09(H)(2)	See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The coating line shall be equipped with a capture system and associated control system which are designed and operated to achieve the following efficiencies for volatile organic compounds (VOC):
 - i. a capture efficiency which is at least 75%, by weight; and
 - ii. a control efficiency which is at least 90%, by weight.
- 2.b The permittee shall operate and maintain the hooding modifications described below:
 - i. All coating applications stations, not utilized exclusively for printing, shall be equipped with a fixed hood with movable flaps that encloses the front face of the coating well to the web entry point into the drying oven during all operations. The design of the fixed hoods is depicted in Figure 1 of Appendix A of the Consent Order dated May 11, 1987. All print heads shall be equipped with a fixed baffle in a manner similar to that shown in Figure 2 of Appendix A of the Consent Order dated May 11, 1987.
 - ii. The fixed hoods shall be ventilated with the final exhaust directed to the solvent recovery system.
 - iii. The topcoat and print head hoods shall be exhausted at a rate sufficient to ensure that external influences do not significantly affect VOC capture performance. An exhaust rate which achieves an average slot air velocity of at least 125 feet per minute (fpm), read by an anemometer over the length of the hood slot, as shown in the front and side views of Figures 1 and 2 of Appendix A of the Consent Order dated May 11, 1987, with its flow sensor held at and oriented parallel to the plane of the slot opening, shall be deemed sufficient unless product quality deterioration requires a lower average slot air velocity.
- 2.c The permittee shall operate and maintain a carbon adsorption system with at least 8,000 cubic feet per minute more carbon adsorption capacity than the capacity existing on May 11, 1987 and shall direct emissions from all lines operating in the color-matching mode to the carbon adsorption system.

II. Operational Restrictions

1. The permittee shall operate the capture system and carbon adsorption system whenever this emissions unit is in operation.

II. Operational Restrictions (continued)

2. The average VOC concentration in the exhaust gases from the carbon adsorbers, for any 3-hour block of time, shall not exceed a VOC concentration (ppm) which is 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous organic monitoring device and recorder which measures and records the VOC concentrations in the exhaust gases from the carbon adsorbers when the emissions unit is in operation. The organic monitoring device and recorder shall be capable of satisfying the performance requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 8 or Performance Specification 9. (Prior to any compliance demonstration, the permittee shall demonstrate that the organic monitoring device and recorder satisfy the requirements of Performance Specification 8 or Performance Specification 9.) The organic monitoring device and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
2. The permittee shall collect and record the following information each day:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation; and
 - b. all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration in the exhaust gases was 20 percent greater than the average concentration during the most recent emission test that demonstrated the emissions unit was in compliance.

IV. Reporting Requirements

1. The permittee shall submit, on a quarterly basis, deviation (excursion) reports which identify all 3-hour blocks of time (when the emissions unit was in operation) during which the average VOC concentration of the exhaust gases from the carbon adsorbers exceeded the concentration limitation specified above. These quarterly reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the oil shipments received during the previous calendar quarters.

V. Testing Requirements

1. When required, compliance with the capture efficiency and control efficiency limitations for VOC shall be determined in accordance with OAC rule 3745-21-10(B) and (C), with adjustments for solvent retained in the product, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

V. Testing Requirements (continued)

- a. Control efficiency testing shall be conducted within 6 months of permit issuance, approximately 2.5 years after permit issuance and within 6 months prior to permit expiration.
- b. Capture efficiency testing shall be conducted within 6 months of permit issuance and within 6 months prior to permit expiration.
- c. The emission testing shall be conducted to demonstrate compliance with the capture efficiency and control efficiency limitations for VOC.
- d. The test(s) shall be conducted while all of the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 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 USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
- f. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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).

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.

3. During the capture efficiency testing, the permittee shall determine the following during three runs of at least one hour in duration each, under the same operating conditions and while producing three (3) different products:
 - a. the total pounds of each of the coatings applied at the line tested during the period of the run;
 - b. the pounds of VOC per gallon of coating, as determined by 40 CFR Part 60, Appendix A, Method 24, in each of the coatings applied at the line tested during the period of the run;
 - c. the VOC concentrations, as determined by 40 CFR Part 60, Appendix A, Method 25 or 25A, in the final oven exhaust directed to the VOC control system from the line tested during the period of the run; and
 - d. the volumetric gas flow rate, as determined by 40 CFR Part 60, Appendix A, Methods 1-4, of the final oven exhaust directed to the VOC control system from the line tested during the period of the run.

V. Testing Requirements (continued)

4. During the capture efficiency testing, the permittee also shall determine the percent of solvent retained in the product using the "head space" test method specified in Appendix D of the Consent Order dated May 11, 1987 as follows:

Appendix D - "head space" test method

- a. Obtaining Sample

Eight 3/16" diameter samples are died out from a cross section of the web obtained at the windup area of the vinyl coating line. The samples are placed in a glass jar, which is sealed with a crimped-on lid.

- b. Solvent Determination

- i. Standard - Standards are prepared by injecting known quantities of solvent into sealed glass jars which are the same jars used for the vinyl samples. The jar containing solvent is heated to vaporize the solvent, and also to produce a uniform mixture. A specific volume of the heated mixture is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks.

- ii. Sample - The jar with the sample is heated at 220 degrees Fahrenheit for 30 minutes during which the retained solvent is driven into the air space in the jar. A specific volume of heated air is withdrawn from the jar and injected into the chromatograph. A chart is produced showing specific peaks. The procedure is repeated until the final solvent peak height is less than 10% of the original peak height.

- c. Calculation - From the chromatograph chart for each sample, the peak height is determined and related to micro-liters of solvent, referencing to the peak heights on the standard chart. The weight per area is calculated by multiplying the total micro-liters of solvent by a predetermined constant and by the ratio of material width of 36 inches (1 yard). Retained solvent is, therefore, expressed as pounds per 100 linear yards of product.

VI. Miscellaneous Requirements

1. The permittee shall maintain a record of general product categories manufactured in the Print and Finish Department. For each general product category, the permittee shall determine the percent of solvent retained in the final material for a representative product in that category using the "head space" test method. As new product categories are developed, the percent solvent retained in the final material for a representative product shall be determined and added to the original listing. The list and any subsequent updates shall be retained by the permittee for as long as the product is manufactured.

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: No. 2 Calendering Line (K012)
Activity Description: No.2 Calendering Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
calendering line with compliance coatings	OAC rule 3745-21-09(G)	2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information each month for the line:
 - a. the name and identification number of each coating, as applied; and
 - b. the VOC content of each coating (excluding water and exempt solvents), as applied.

IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days following the end of the calendar month.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

V. Testing Requirements (continued)

1.a Emission Limitation:

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

Applicable Compliance Method:

OAC rule 3745-21-10(B). USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Calendering Line (K013)
Activity Description: No.3 Calendering Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
calendering line with compliance coatings	OAC rule 3745-21-09(G)	2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information each month for the line:
 - a. the name and identification number of each coating, as applied; and
 - b. the VOC content of each coating (excluding water and exempt solvents), as applied.

IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days following the end of the calendar month.

V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

V. Testing Requirements (continued)

1.a Emission Limitation:

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

Applicable Compliance Method:

OAC rule 3745-21-10(B). USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 41 Plastisol Line (P014)

Activity Description: No. 41 Plastisol Line with Electrostatic Precipitator

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>
7,500 pounds per hour plastisol line controlled with an electrostatic precipitator	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.
	OAC rule 3745-17-11(B)(1)	9.9 pounds per hour of particulate emissions
	OAC rule 3745-21-09(F)	2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents

2. Additional Terms and Conditions

- 2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

II. Operational Restrictions

1. The average daily, total combined power input (in kilowatts) to all fields of the ESP shall be no less than 90 percent of the average daily, total combined power input to such fields that was reported during the day of the most recent emissions test which showed that the emissions unit was in compliance with the particulate emission limitation.
2. The permittee shall burn only natural gas or LPG as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information each month:
 - a. the name and identification number of each coating, as applied; and
 - b. the VOC content of each coating (excluding water and exempt solvents), as applied.
2. For each day during which the permittee burns a fuel other than natural gas and/or LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

3. The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:
 - a. the secondary voltage, in kilovolts (kV), and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;
 - b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kilovolts) by the secondary current (in amps) for each TR set); and
 - c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).
4. The permittee shall record the following information for each day: the ESP sections that are out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days following the end of the calendar month.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or LPG was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit deviation (excursion) reports which identify the sections of the ESP that were out of service along with the time period involved.
4. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average total combined power input to all fields of the ESP does not comply with the operational restriction specified in section A.II.1 of this permit.
5. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

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

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with OAC rule 3745-17-03(B)(1).
 - 1.b Emission Limitation:

9.9 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.c Emission Limitation:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-21-10(B). USEPA Methods 24 and 24A shall be used to determine the VOC contents for (a) coatings and (b) flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 51 Plastisol Line (P018)
Activity Description: No. 51 Plastisol Line with Incinerator

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>
11,375 pounds per hour plastisol line controlled with a thermal incinerator	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.
	OAC rule 3745-17-11(B)(1)	16.5 pounds per hour of particulate emissions
	OAC rule 3745-21-09(F)	See A.I.2.b below.
	OAC rule 3745-31-05 (PTI 04-406)	0.11 pound of VOC per gallon of coating, excluding water and exempt solvents, as applied
		See A.I.2.c below.

2. Additional Terms and Conditions

- Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
- The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- The permittee shall employ a thermal incinerator for this emissions unit that maintains a minimum control efficiency of 95%, by weight, for particulates and VOC emissions.

II. Operational Restrictions

- The permittee shall burn only natural gas and/or #2 fuel oil in this emissions unit.
- The permittee shall operate the capture system and thermal incinerator control system whenever this emissions unit is in operation.

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.

III. Monitoring and/or Record Keeping Requirements

- For each day during which the permittee burns a fuel other than natural gas and/or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

2. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be 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 for each day:

- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and
 - b. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
3. The permittee shall maintain records of the following information each month:
 - a. the name and identification number of each coating; and
 - b. the VOC content of each coating (excluding water and exempt solvents).
 4. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in permit to install 04-406, issued on Sept. 9, 1987: section A.III.3. The monitoring and record keeping requirements contained in the above-referenced permit to install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with the requirements constitutes compliance with the underlying monitoring and record keeping requirements in the permit to install.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or #2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.
3. The permittee shall notify the Toledo Division of Environmental Services in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days following the end of the calendar month.
4. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

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

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

thermal incinerator which demonstrates a minimum control efficiency of 95%, by weight, for particulates and VOC emissions

Applicable Compliance Method:

The most recent stack test that demonstrated compliance (99.5%) was performed on September 15, 1988. If required, the control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Method 5 and Method 18 or 25 of 40 CFR Part 60 Appendix A. 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.

1.c Emission Limitation:

0.11 pound of VOC per gallon of coating, excluding water and exempt solvents, as applied

Applicable Compliance Method:

Compliance shall be demonstrated through the monitoring and record keeping requirements of section A.III.3. USEPA Methods 24 and 24A shall be used to determine the VOC contents for coatings, and flexographic and rotogravure printing inks and related coatings, respectively. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, the permittee determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

1.d Emission Limitation:

16.5 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Bulk Handling System (Z001)

Activity Description: Bulk Handling System

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>
pneumatic conveying systems for railcar unloading, truck unloading and bulk handling with 9 fabric filters	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from all of the pneumatic systems shall not exceed 13 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall operate each dust collection system whenever the associated emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records that document any time periods when any dust collection system was not in service when the associated emissions unit was in operation.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from each baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each day during which any dust collection system was not in service when the associated emissions unit was in operation.
2. The permittee shall submit written (deviation) reports which (a) identify all days during which any visible particulate emissions were observed from one or more of the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

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

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(1)
 - 1.b Emission Limitation:

13 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Ribbon Blenders / Banbury Mixers (Z003)
Activity Description: Ribbon Blenders and Banbury Mixers for Calendering System

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>
5 ribbon blenders and Banbury mixers for the calendering system, controlled with a fabric filter	OAC rule 3745-17-07(A)(1)	The visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	11 pounds per hour of particulate emissions (total)
	OAC rule 3745-21-07(G)(2)	Emissions of organic compounds shall not exceed 8 pounds per hour and 40 pounds per day (total).

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall operate the dust collection system whenever this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall maintain records that document any time periods when the dust collection system was not in service when the emissions unit was in operation.
- The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - the color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to eliminate the visible emissions.

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

3. The permittee shall maintain records of the following information for each day for all ribbon blenders and the associated Banbury mixers:
 - a. the company identification for each VOC containing material and photochemically reactive cleanup material employed;
 - b. the number of gallons of each VOC containing material and photochemically reactive cleanup material employed, in gallons per day;
 - c. the organic compound content of each VOC containing material and photochemically reactive cleanup material, in pounds per gallon;
 - d. the total organic compound emission rate for all VOC containing materials and photochemically reactive cleanup materials, in pounds per day (multiply (b) times (c) for each VOC containing material and photochemically reactive cleanup material and add together);
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly organic compound emission rate for all VOC containing materials and photochemically reactive cleanup materials, i.e., (d)/(e), in pounds per hour (average).

[Note: The VOC containing material information must be for the materials as employed, including any thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

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 dust collection system was not in service when the associated emissions unit was in operation;
 - b. an identification of each day during which the average hourly organic compound emissions from the VOC containing materials and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and
 - c. an identification of each day during which the organic compound emissions from the VOC containing materials and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.
2. The permittee shall submit written (deviation) reports which (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

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

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

11 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

8 pounds per hour of organic compounds
40 pounds per day of organic compounds

Applicable Compliance Method:

Compliance with the hourly and daily organic compound emission limitations shall be based upon the record keeping requirements contained in section A.III.3 of this permit.

Formulation data or USEPA Method 24 shall be used to determine the organic compound content of the VOC containing materials and cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Plastisol Line 41 De-bagging (Z004)
Activity Description: PVC Resin De-Bagging Operation - Plastisol Line No. 41

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>
automated PVC resin de-bagging operation with fabric filter for no. 41 plastisol line	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the automatic de-bagging system shall not exceed 4.4 pounds per hour.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall operate the dust collection system whenever this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records that document any time periods when the dust collection system was not in service when the emissions unit was in operation.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each day during which the dust collection system was not in service when the emissions unit was in operation.
2. The permittee shall submit written (deviation) reports which (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

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

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(1)
 - 1.b Emission Limitation:

4.4 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Plastisol Line 51 De-bagging (Z005)
Activity Description: PVC Resin De-Bagging Operation - Plastisol Line No. 51

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>
two automated PVC resin de-bagging operations with two fabric filters for no. 51 plastisol line	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from both automatic de-bagging systems shall not exceed 14.7 pounds per hour.
	OAC rule 3745-31-05(A)(3) (PTI 04-406)	no visible particulate emissions from any stack

2. Additional Terms and Conditions

- 2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall operate each dust collection system whenever the associated emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records that document any time periods when the dust collection system was not in service when the associated emissions unit was in operation.
2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from each baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include an identification of each day during which the dust collection system was not in service when the associated emissions unit was in operation.
2. The permittee shall submit written (deviation) reports which (a) identify all days during which any visible particulate emissions were observed from either or both of the baghouses serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions.
3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

V. Testing Requirements

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

1.a Emission Limitation:

no visible particulate emissions from any stack

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Method 22.

1.b Emission Limitation:

14.7 pounds per hour of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the procedures specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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