



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

12/06/02

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

03-17-01-0027

Baja Boats, Inc.
Kathy Burton
1520 Isaac Beal Road
Bucyrus, OH 44820-9604

Dear Kathy Burton:

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

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

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

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

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

Very truly yours,

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

cc: Northwest District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

| | | |
|-----------------------------|---------------------------------|----------------------------------|
| Issue Date: 12/06/02 | Effective Date: 12/27/02 | Expiration Date: 12/06/07 |
|-----------------------------|---------------------------------|----------------------------------|

This document constitutes issuance of a Title V permit for Facility ID: 03-17-01-0027 to:
 Baja Boats, Inc.
 1520 Isaac Beal Road
 Bucyrus, OH 44820-9604

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

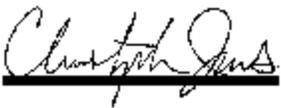
| | | |
|---|---|---|
| R001 (Gel coat spray) Gel coat spray. Binks #1. | Fiberglass/Resin Lay-up station No. 07 | R022 (Lay-up station) Fiberglass/Resin Lay-up station No. 16 |
| R002 (Gel coat spray) Gel coat spray. Binks #2. | R012 (Lay-up station) Fiberglass/Resin Lay-up station No. 08 | R023 (Lay-up station) Fiberglass/Resin Lay-up station No. 17 |
| R003 (Gel coat spray) Gel coat spray. Booth "B". | R013 (Lay-up station) Fiberglass/Resin Lay-up station No. 09 | R024 (Lay-up station) Fiberglass/Resin Lay-up station No. 18 |
| R004 (Gel coat spray) Gel coat spray | R014 (Lay-up station) Fiberglass/Resin Lay-up station No. 10 | R025 (Lay-up station) Fiberglass/Resin Lay-up station No. 19 |
| R005 (Lay-up station) Fiberglass/Resin Lay-up station No. 01 | R015 (Lay-up station) Fiberglass/Resin Lay-up station No. 11 | R026 (Lay-up station) Fiberglass/Resin Lay-up station No. 20 |
| R006 (Lay-up station) Fiberglass/Resin Lay-up station No. 02 | R016 (Lay-up station) Fiberglass/Resin Lay-up station No. 12 | R027 (Lay-up station) Fiberglass/Resin Lay-up station No. 21 |
| R007 (Lay-up station) Fiberglass/Resin Lay-up station No. 03 | R017 (Lay-up station) Fiberglass/Resin Lay-up station No. 13 | R028 (Lay-up station) Fiberglass/Resin Lay-up station No. 22 |
| R008 (Lay-up station) Fiberglass/Resin Lay-up station No. 04 | R018 (Lay-up station) Fiberglass/Resin Lay-up station No. 14 | R029 (Lay-up station) Fiberglass/Resin Lay-up station No. 23 |
| R009 (Lay-up station) Fiberglass/Resin Lay-up station No. 05 | R019 (Lay-up station) Fiberglass/Resin Lay-up station No. 15 | R030 (Lay-up station) Fiberglass/Resin Lay-up station No. 24 |
| R010 (Lay-up station) Fiberglass/Resin Lay-up station No. 06 | R020 (Gluing for carp) Gluing for carp | R031 (Lay-up station) Fiberglass/Resin Lay-up station No. 25 |
| R011 (Lay-up station) | R021 (Gluing for carp) Gluing for carp | |

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419) 352-8461

OHIO ENVIRONMENTAL PROTECTION AGENCY

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

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

1. **Monitoring and Related Record Keeping and Reporting Requirements**

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))
- c. The permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))
 - ii. **For emission limitations, operational restrictions, and control device operating parameter limitations:**
 - (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring and record keeping requirements specified in this permit; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the

deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

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

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

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

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

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

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

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and

reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

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

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

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

2. Scheduled Maintenance/Malfunction Reporting

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

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

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

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

4. Title IV Provisions

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

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

5. Severability Clause

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

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

6. General Requirements

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

- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

7. Fees

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

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

8. Marketable Permit Programs

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

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

9. Reasonably Anticipated Operating Scenarios

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

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

10. Reopening for Cause

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.
(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. Federal and State Enforceability

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

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

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

- i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

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

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

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

15. Emergencies

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

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

16. Off-Permit Changes

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as

insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)
(*Authority for term: OAC rule 3745-77-07(I)*)

17. Compliance Method Requirements

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

(*This term is provided for informational purposes only.*)

18. Insignificant Activities

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

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

19. Permit to Install Requirement

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

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

20. Air Pollution Nuisance

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

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

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

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

2. Records Retention Requirements

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

3. Inspections and Information Requests

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

shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

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

5. Permit Transfers

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

6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1. Total organic compound (OC) emissions resulting from cleanup operations at this facility shall not exceed 142.2 tons per rolling 12-month period, i.e., OC emissions are based upon a rolling 12-month summation of the monthly emissions. This equates to 43,156 gallons of solvent (acetone) at a density of 6.59 lbs/gal. [PTI 03-9201, issued on 10/2/96, which is equal to or more stringent than PTI-03-3023, issued on 4/8/87, and PTI 03-8571, issued on 6/28/95]
2. The permittee shall collect and record the following information for each month for the cleanup operations at this facility:
 - a. the company identification for each OC-containing cleanup material employed;
 - b. the number of gallons of each OC-containing cleanup material employed;
 - c. the OC content of each OC-containing cleanup material, in pounds per gallon;
 - d. the number of pounds of waste solvent, minus any solids, etc., sent off-site for disposal and/or reclamation;
 - e. the OC emissions for the month, in pounds, based on the summation of (b) x (c) for all cleanup materials minus (d); and
 - f. the total OC emissions for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months], in pounds and tons (rounded off to the nearest 0.1 ton).
3. The permittee shall immediately notify (i.e., as soon as practical) the appropriate Ohio EPA District Office of any exceedance of the emission limitation of 142.2 tons OC per rolling 12-month period for cleanup operations at this facility [PTI 03-9201, issued 10/2/96]. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the rolling 12-month OC emissions from the cleanup operations at the facility exceeded 142.2 tons, and the actual rolling 12-month OC emissions.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.
4. Work practice standards*:
 - a. All containers in this facility containing OC shall be equipped with covers and shall remain covered whenever not in use.
 - b. Employees working at any lay-up station (i.e., emissions units R005-R019 and R022-R031) shall be issued no more than 2.5 gallons of acetone per person per day.
 - c. The permittee shall maintain a daily log of the amount (gallons) of acetone issued per source (emissions unit).

*from PTI 03-3023, PTI 03-8571, and PTI 03-9201

A. State and Federally Enforcable Section (continued)

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

Emission Limitation:

142.2 tons OC per rolling 12-month period, for cleanup operations at the facility

Applicable Compliance Method:

Compliance with the limitation above shall be based on the record keeping requirements contained in section A.2. of these terms and conditions.

Formulation data or USEPA Method 24 shall be used to determine the OC content of each cleanup material. Waste analysis data or USEPA Method 24 shall be used to determine the OC content of each waste solvent.

6. On August 22, 2001, U.S. EPA promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Boat Manufacturing, 40 CFR Part 63 Subpart VVVV. The effective date for this NESHAP standard is August 22, 2001. This facility is subject to Subpart VVVV as an existing major source with a compliance date of August 23, 2004, as specified under 40 CFR 63.5695 and Table 1 to Subpart VVVV. Pursuant to 40 CFR 63.5761 and Table 7 to Subpart VVVV, the permittee shall submit the following notifications:

a. Initial Notification: Shall be submitted not later than 120 days after the effective date of the standard and shall contain the information specified in 40 CFR 63.9(b)(2).

b. Notification of Compliance Status: Shall be submitted by the date specified in Table 7 to Subpart VVVV (date based on means of compliance) and shall contain the information specified in 40 CFR 63.9(h)(2)(i)(A) through (G).

c. Other Notifications: Where applicable, other notifications under 40 CFR 63.5761(b) or Table 7 to Subpart VVVV shall be submitted in accordance with the requirements specified for such notifications.

In accordance with paragraph A.10.a. of the Part I - General Terms and Conditions this permit, the permittee shall submit an application to reopen this permit within 18 months after promulgation of this NESHAP standard.

B. State Only Enforceable Section

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

Flotation Foam Injection & Hull Finishing, Ohio EPA emissions unit P001;
Grinding Area - Dust Collection System, Ohio EPA emissions unit P002;
Woodworking - Cyclone and Baghouse, Ohio EPA emissions unit P003;
6000-gallon acetone storage tank AT-1, Ohio EPA emissions unit T003;
1500-gallon acetone storage tank AT-2, Ohio EPA emissions unit T004;
6000-gallon resin storage tank RT-3, Ohio EPA emissions unit T005;
6000-gallon resin storage tank RT-4, Ohio EPA emissions unit T006;
6000-gallon resin storage tank RT-5, Ohio EPA emissions unit T007;
Assembly - Small Boats, Ohio EPA emissions unit Z001;
Engine Compartment Painting, Ohio EPA emissions unit Z002;
Mold Maintenance, Ohio EPA emissions unit Z003;
Research & Development, Ohio EPA emissions unit Z004;
Assembly - Big Boats, Ohio EPA emissions unit Z005; and
Assembly Area for Twin Engine Boats, Ohio EPA emissions unit Z006.

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: Gel coat spray (R001)
Activity Description: Gel coat spray. Binks #1.

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> |
|---|---|---|
| gel coat spray booth 1 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from gel coats) |
| | OAC 3745-17-11(B)(2) | See A.II.1. |
| | OAC 3745-17-07(A) | none (See A.I.2.a.) |
| | OAC 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87) | none (See A.I.2.b.) |
| | | 5.74 tons VOC/yr (from gel coats) |
| | | The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A). |

2. Additional Terms and Conditions

- 2.a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- 2.b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each gel coat (polyester resin) employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
total OC emissions (pounds) = A x B x 0.596

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above]

0.596 = weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on a worst case 45% monomer content for gel coats, with baseline values for other variables in the model);
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average).
2. The permittee shall collect and record the following information each month for the gel coats (polyester resins) employed in this emissions unit:
 - a. the total VOC emissions from the gel coats employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the gel coats employed during the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01(B)(6).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the gel coats exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the gel coats exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the gel coats for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from gel coats)

5.74 ton VOC/yr (from gel coats)

Applicable Compliance Method:

Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each gel coat.

2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Gel coat spray (R002)
Activity Description: Gel coat spray. Binks #2.

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> |
|---|---|---|
| gel coat spray booth 2 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from gel coats) |
| | OAC 3745-17-11(B)(2) | See A.II.1. none (See A.I.2.a.) |
| | OAC 3745-17-07(A) | none (See A.I.2.b.) |
| | OAC 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87) | 5.74 tons VOC/yr (from gel coats) |
| | | The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A). |

2. Additional Terms and Conditions

- 2.a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- 2.b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each gel coat (polyester resin) employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
total OC emissions (pounds) = A x B x 0.596

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above]

0.596 = weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on a worst case 45% monomer content for gel coats, with baseline values for other variables in the model);
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average).
2. The permittee shall collect and record the following information each month for the gel coats (polyester resins) employed in this emissions unit:
 - a. the total VOC emissions from the gel coats employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the gel coats employed during the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01(B)(6).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the gel coats exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the gel coats exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the gel coats for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from gel coats)

5.74 ton VOC/yr (from gel coats)

Applicable Compliance Method:

Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each gel coat.

2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Gel coat spray (R003)
Activity Description: Gel coat spray. Booth "B".

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> |
|---|---|---|
| gel coat spray booth 3 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from gel coats) |
| | OAC 3745-17-11(B)(2) | See A.II.1. none (See A.I.2.a.) |
| | OAC 3745-17-07(A) | none (See A.I.2.b.) |
| | OAC 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87) | 5.74 tons VOC/yr (from gel coats) |
| | | The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A). |

2. Additional Terms and Conditions

- 2.a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- 2.b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each gel coat (polyester resin) employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
total OC emissions (pounds) = A x B x 0.596

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above]

0.596 = weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on a worst case 45% monomer content for gel coats, with baseline values for other variables in the model);
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average).
2. The permittee shall collect and record the following information each month for the gel coats (polyester resins) employed in this emissions unit:
 - a. the total VOC emissions from the gel coats employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the gel coats employed during the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01(B)(6).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the gel coats exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the gel coats exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the gel coats for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from gel coats)

5.74 ton VOC/yr (from gel coats)

Applicable Compliance Method:

Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each gel coat.

2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Gel coat spray (R004)

Activity Description: Gel coat spray

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> |
|---|---|---|
| gel coat spray booth 4 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from gel coats) |
| | OAC 3745-17-11(B)(2) | See A.II.1. |
| | OAC 3745-17-07(A) | none (See A.I.2.a.) |
| | OAC 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87) | none (See A.I.2.b.) |
| | | 5.74 tons VOC/yr (from gel coats) |
| | | The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A). |

2. Additional Terms and Conditions

- 2.a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- 2.b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each gel coat (polyester resin) employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
total OC emissions (pounds) = A x B x 0.596

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above]

0.596 = weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on a worst case 45% monomer content for gel coats, with baseline values for other variables in the model);
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average).
2. The permittee shall collect and record the following information each month for the gel coats (polyester resins) employed in this emissions unit:
 - a. the total VOC emissions from the gel coats employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the gel coats employed during the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01(B)(6).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the gel coats exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the gel coats exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the gel coats for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from gel coats)

5.74 ton VOC/yr (from gel coats)

Applicable Compliance Method:

Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each gel coat.

2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R005)
Activity Description: Fiberglass/Resin Lay-up station No. 01

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> |
|---|--|---|
| fiberglass/resin lay-up station 1 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R006)
Activity Description: Fiberglass/Resin Lay-up station No. 02

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> |
|---|--|---|
| fiberglass/resin lay-up station 2 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R007)
Activity Description: Fiberglass/Resin Lay-up station No. 03

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> |
|---|--|---|
| fiberglass/resin lay-up station 3 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R008)
Activity Description: Fiberglass/Resin Lay-up station No. 04

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> |
|---|--|---|
| fiberglass/resin lay-up station 4 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R009)
Activity Description: Fiberglass/Resin Lay-up station No. 05

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> |
|---|--|---|
| fiberglass/resin lay-up station 5 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R010)
Activity Description: Fiberglass/Resin Lay-up station No. 06

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> |
|---|--|---|
| fiberglass/resin lay-up station 6 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R011)
Activity Description: Fiberglass/Resin Lay-up station No. 07

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> |
|---|--|---|
| fiberglass/resin lay-up station 7 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R012)
Activity Description: Fiberglass/Resin Lay-up station No. 08

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> |
|---|--|---|
| fiberglass/resin lay-up station 8 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
total OC emissions (pounds) = A x B x EF

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =
0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R013)
Activity Description: Fiberglass/Resin Lay-up station No. 09

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> |
|---|--|---|
| fiberglass/resin lay-up station 9 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R014)
Activity Description: Fiberglass/Resin Lay-up station No. 10

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> |
|---|--|---|
| fiberglass/resin lay-up station 10 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R015)
Activity Description: Fiberglass/Resin Lay-up station No. 11

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> |
|---|--|---|
| fiberglass/resin lay-up station 11 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R016)
Activity Description: Fiberglass/Resin Lay-up station No. 12

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> |
|---|--|---|
| fiberglass/resin lay-up station 12 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R017)
Activity Description: Fiberglass/Resin Lay-up station No. 13

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> |
|---|--|---|
| fiberglass/resin lay-up station 13 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R018)
Activity Description: Fiberglass/Resin Lay-up station No. 14

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> |
|---|--|---|
| fiberglass/resin lay-up station 14 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R019)
Activity Description: Fiberglass/Resin Lay-up station No. 15

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> |
|---|--|---|
| fiberglass/resin lay-up station 15 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) | See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).

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

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- 2.a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Gluing for carp (R020)

Activity Description: Gluing for carp

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> |
|---|--|---|
| carpet adhesive spray application station 1 | OAC rule 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from adhesives) |
| | OAC 3745-17-11(B)(2) | See A.II.1. none (See A.I.2.a.) |
| | OAC 3745-17-07(A) | none (See A.I.2.b.) |
| | OAC rule 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87) | 1.92 tons VOC/yr (from adhesives) |
| | | The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A). |

2. Additional Terms and Conditions

- 2.a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- 2.b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the adhesives employed in this emissions units:
 - a. the company identification for each adhesive employed;
 - b. the number of gallons of each adhesive employed;
 - c. the OC content of each adhesive material, in pounds per gallon;
 - d. the OC emissions rate for each adhesive material employed, i.e., (b)x(c), in pounds per day
 - e. the total OC emission rate for all adhesives employed, i.e., the summation of (d) for all adhesives, in pounds per day;
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly OC emission rate, i.e., (e)/(f), in pounds per hour (average).

[Note: This information shall be for the adhesives as employed, including any thinning solvents added at the emissions unit.]

2. The permittee shall collect and record the following information each month for the adhesives employed in this emissions unit:
 - a. the total VOC emissions from the adhesives employed during the month, i.e., the summation of A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the adhesives for the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01(B)(6), unless the permittee's records indicate otherwise.

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the adhesives exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the adhesives exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the adhesives for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from adhesives)

1.92 tons VOC/yr (from adhesives)

Applicable Compliance Method:

Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 24 shall be used to determine the OC content of each adhesive.

2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

VI. Miscellaneous Requirements

1. The distribution of operational load between this emissions unit and emissions unit R021 has changed since the issuance of PTI 03-3023. As a result, the permittee cannot run at its desired capacity and achieve compliance with the current annual emissions limit. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Gluing for carp (R021)

Activity Description: Gluing for carp

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> |
|---|--|---|
| carpet adhesive spray application station 2 | OAC rule 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from adhesives) |
| | OAC 3745-17-11(B)(2) | See A.II.1. none (See A.I.2.a.) |
| | OAC 3745-17-07(A) | none (See A.I.2.b.) |
| | OAC rule 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87) | 16.92 tons VOC/yr (from adhesives) |
| | | The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A). |

2. Additional Terms and Conditions

- 2.a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- 2.b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the adhesives employed in this emissions units:
 - a. the company identification for each adhesive employed;
 - b. the number of gallons of each adhesive employed;
 - c. the OC content of each adhesive material, in pounds per gallon;
 - d. the OC emissions rate for each adhesive material employed, i.e., (b)x(c), in pounds per day
 - e. the total OC emission rate for all adhesives employed, i.e., the summation of (d) for all adhesives, in pounds per day;
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly OC emission rate, i.e., (e)/(f), in pounds per hour (average).

[Note: This information shall be for the adhesives as employed, including any thinning solvents added at the emissions unit.]

2. The permittee shall collect and record the following information each month for the adhesives employed in this emissions unit:
 - a. the total VOC emissions from the adhesives employed during the month, i.e., the summation of A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the adhesives for the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01(B)(6), unless the permittee's records indicate otherwise.

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the adhesives exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the adhesives exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the adhesives for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from adhesives)

16.92 tons VOC/yr (from adhesives)

Applicable Compliance Method:

Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 24 shall be used to determine the OC content of each adhesive.

2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/ Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--|
|---|---|--|

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: Lay-up station (R022)
Activity Description: Fiberglass/Resin Lay-up station No. 16

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> |
|---|--|---|
| fiberglass/resin lay-up station 16 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95) | See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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

3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

- 2.a.** Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b.** Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c.** Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

- 1.** Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R023)
Activity Description: Fiberglass/Resin Lay-up station No. 17

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> |
|---|--|---|
| fiberglass/resin lay-up station 17 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95) | See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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

3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

- 2.a.** Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b.** Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c.** Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

- 1.** Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R024)
Activity Description: Fiberglass/Resin Lay-up station No. 18

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> |
|---|--|---|
| fiberglass/resin lay-up station 18 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95) | See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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

3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

- 2.a.** Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b.** Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c.** Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

- 1.** Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R025)
Activity Description: Fiberglass/Resin Lay-up station No. 19

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> |
|---|--|---|
| fiberglass/resin lay-up station 19 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95) | See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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

3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

- 2.a.** Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b.** Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c.** Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

- 1.** Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R026)
Activity Description: Fiberglass/Resin Lay-up station No. 20

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> |
|---|--|---|
| fiberglass/resin lay-up station 20 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95) | See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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

3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

- 2.a.** Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b.** Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c.** Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R027)
Activity Description: Fiberglass/Resin Lay-up station No. 21

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> |
|---|--|---|
| fiberglass/resin lay-up station 21 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95) | See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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

3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

- 2.a.** Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b.** Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c.** Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

- 1.** Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R028)
Activity Description: Fiberglass/Resin Lay-up station No. 22

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> |
|---|--|---|
| fiberglass/resin lay-up station 22 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95) | See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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

3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

- 2.a.** Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b.** Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c.** Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

- 1.** Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R029)
Activity Description: Fiberglass/Resin Lay-up station No. 23

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> |
|---|--|---|
| fiberglass/resin lay-up station 23 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95) | See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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

3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

- 2.a.** Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b.** Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c.** Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

- 1.** Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R030)
Activity Description: Fiberglass/Resin Lay-up station No. 24

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> |
|---|--|---|
| fiberglass/resin lay-up station 24 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95) | See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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

3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

- 2.a.** Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b.** Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c.** Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

- 1.** Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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: Lay-up station (R031)
Activity Description: Fiberglass/Resin Lay-up station No. 25

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> |
|---|--|---|
| fiberglass/resin lay-up station 25 | OAC 3745-21-07(G)(2) | 8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins) |
| | OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95) | See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2). |

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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

3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

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

V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

- 2.a.** Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- 2.b.** Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- 2.c.** Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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> |
|---|---|--|
|---|---|--|

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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