



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

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

09/15/03

CERTIFIED MAIL

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

14-09-04-0850
Plas-Tanks Industries, Inc.
John Kent Covey
39 Standen Drive
Hamilton, OH 45015-2209

Dear John Kent Covey:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 06/26/03. The comment period for the Draft permit has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. **In order to facilitate our review of all the comments or concerns you may have with the enclosed preliminary proposed permit, please provide a hand marked-up copy of the permit showing the changes you think are necessary, along with any additional summary comments, within fourteen (14) days from your receipt of this letter to:**

**Ohio EPA, Division of Air Pollution Control
Jim Orlemann, Manager, Engineering Section
Preliminary Proposed Title V Permit Correspondence
122 South Front Street
Columbus, Ohio 43215**

and

Hamilton County Dept. of Environmental Services
250 William Howard Taft Rd
Cincinnati, OH 45219-2660
(513) 946-7777

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

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

Sincerely,

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

cc: Hamilton County Dept. of Environmental Services
File, DAPC PMU



State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Issue Date: 09/15/03	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance
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This document constitutes issuance of a Title V permit for Facility ID: 14-09-04-0850 to:
 Plas-Tanks Industries, Inc.
 39 Standen Drive
 Hamilton, OH 45015-2209

Emissions Unit ID (Company ID)/Emissions Unit Activity Description		
P001 (Station #1) Winding, spray, and/or hand lay-up of corrosion resistant fiberglass tanks.	P003 (Station #3) Winding, spray, and/or hand lay-up of corrosion resistant fiberglass tanks.	P005 (Station #5) Spray and/or hand lay-up of pipe and dish (covers)
P002 (Station #2) Winding, spray, and/or hand lay-up of corrosion resistant fiberglass tanks.	P004 (Station #4) Winding, spray, and/or hand lay-up of corrosion resistant fiberglass tanks.	P006 (Station #6) Nozzle and appurtence-making via spray/hand lay-up and installation (finish & final inspection)

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

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

Hamilton County Dept. of Environmental Services
 250 William Howard Taft Rd
 Cincinnati, OH 45219-2660
 (513) 946-7777

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
 Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

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

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

- c. The permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

 - ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**
 - (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (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 applicable, the permittee shall 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”); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management 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. The permittee shall comply with the applicable requirements of 40 CFR 63, Subpart WWWW (National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production) as specified in Attachment A of this permit.

B. State Only Enforceable Section

1. There are no insignificant emissions units located at this facility.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Station #1 (P001)

Activity Description: Winding, spray, and/or hand lay-up of corrosion resistant fiberglass tanks.

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>
Station 1 - fiberglass tank fabrication using spray, filament winding, and hand layup	OAC rule 3745-31-05(A)(3) (PTI 14-05356)	<p>7.3 tons per year (TPY) of organic compound (OC) emissions from coatings employed (resins and gelcoats)</p> <p>Fugitive particulate emissions (PE) from this emissions unit shall not exceed 2.94 lbs/hour*.</p> <p>6.78 TPY of PE from all stacks associated with this emissions unit*</p> <p>12.88 TPY of fugitive PE*</p> <p>*The PE limitations are greater than the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with these emission limitations.</p> <p>See Sections A.I.2.a and A.II below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-07(A)(1), 3745-17-07(B)(1), 3745-17-08(B), 3745-17-11(B)(1) and 40 CFR Part 63, Subpart WWWW.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-07(G)(2)	8 lbs of OC emissions/hour from coatings (resins and gelcoats) 40 lbs of OC emissions/day from coatings (resins and gelcoats)
	OAC rule 3745-17-07(A)	See Section A.I.2.b below. Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)(1)	Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	The current operating and maintenance practices associated with this emissions unit are sufficient to satisfy the reasonably available control measure requirements specified in OAC rule 3745-17-08(B).
	OAC rule 3745-17-11(B)(1) (Based on Table I)	1.55 lbs of PE/hour from all stacks associated with this emissions unit.* *The hourly PE limitation is greater than the emissions unit's potential to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with this emission limitation.
	40 CFR Part 63, Subpart WWWW	The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart WWWW (National Emission standards for Hazardous Air Pollutants : Reinforced Plastic Composites Production) as specified in Attachment A of this permit.

2. Additional Terms and Conditions

- 2.a** The total OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed the following:
 - i. 250 lbs of OC emissions/day; and
 - ii. 45.63 TPY of OC emissions as a rolling, 12-month summation.
- 2.b** Section A.II.4 prohibits the use of photochemically reactive cleanup materials in this emissions unit. Also, the OC emissions from nonphotochemically reactive cleanup materials do not count towards compliance with the hourly and daily emission limitations.

II. Operational Restrictions

1. The following limitations for resins employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 58%, by weight; and
 - b. the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed.
2. The following limitations for gelcoats employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 35%, by weight; and
 - b. the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of gelcoat processed.
3. The maximum OC content of each cleanup material employed in this emissions unit shall not exceed 6.6 lbs of OC/gallon.
4. The permittee shall not employ any photochemically reactive cleanup material in this emissions unit.
5. The cleanup materials employed in this emissions unit shall not contain any hazardous air pollutants (HAPs), as defined in Section 112(b) of the 1990 Clean Air Act Amendments.
6. The permittee shall keep containers that store any HAP materials and/or cleanup materials closed or covered except during the addition or removal of materials.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following resin and gelcoat usage information for each day this emissions unit is in operation:
 - a. the company identification for each resin and gelcoat employed;
 - b. the number of pounds of each resin and gelcoat employed;
 - c. the percent, by weight, styrene of each resin and gelcoat employed;
 - d. the calculated emission factor (in lbs of OC emissions/ton) for the resin or gelcoat processed using the guidance document from the Unified Emission Factor (UEF), Table 1 from the "Technical Discussion of the Unified Emission Factors for Open Molding of Composites, dated July 23, 2001 or the most recent update;
 - e. the total OC emissions for all resins and gelcoats employed, in pounds $[(b) \times (d)]$ for all gelcoats employed, plus $(b) \times (d)$ for all resins employed, $\times 1 \text{ ton}/2,000 \text{ lbs}$;
 - f. the total number of hours this emissions unit was in operation; and
 - g. the average hourly OC emission rate for all resins and gelcoats employed $[(e)/(f)]$.

Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

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

2. The permittee shall collect and record the following information each day for cleanup materials employed in emissions units P001-P006, combined:
 - a. the company identification for each cleanup material employed;
 - b. a record indicating whether or not the cleanup material is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5);
 - c. a record indicating whether or not the cleanup material contains any HAPs, as defined in Section 112(b) of the 1990 Clean Air Act Amendments;
 - d. the total number of gallons or pounds of each cleanup material employed in emissions units P001-P006, combined (Cleanup material employed is equal to [the amount of virgin material dispensed plus recycled cleanup material from the previous day] minus [the cleanup material left at the end of the day]. The permittee may record the use of cleanup material in pounds per day if the virgin and recycled cleanup material is weighed.);
 - e. the OC content of each cleanup material employed, in lbs of OC/gallon or lbs of OC/pound; and
 - f. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (the daily OC emissions from cleanup materials shall be calculated by multiplying the OC content recorded in line (e) by the number of gallons or pounds employed recorded in line (d)).
3. The permittee shall maintain records of the following information each month for emissions units P001-P006, combined:
 - a. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (i.e., the summation of A.III.2.f for all days of the calendar month);
 - b. the updated rolling, 12-month summation of OC emissions from all cleanup materials, in tons, from emissions units P001-P006, combined (i.e., the total OC emissions for the current month plus the OC emissions for the previous 11 calendar months and divided by 2,000 lbs/ton); and
 - c. the amount of cleanup material sent out for disposal and the solvent content of that cleanup material. (The solvent portion of any cleanup material sent out for disposal can be subtracted from the monthly cleanup material usage totals for emissions units P001-P006. The permittee shall retain records of cleanup material analyses for the solvent and solids content of cleanup materials sent out for disposal.)
4. The permittee shall maintain annual records of the total OC emissions, in tons, from all coatings (resins and gelcoats) employed.
5. The permittee shall operate metering equipment to measure the amount of all resins and gelcoats used in this emissions unit. The permittee shall calibrate the meters to measure the amount, in weight or volume, of all resins and gelcoats used in this emissions unit in accordance with the procedures specified by the manufacturer of the metering equipment as being necessary or appropriate to achieve the accuracy of the measurements guaranteed or specified by such manufacturer which accuracy shall be guaranteed or specified as being within plus or minus 5%. The calibration and accuracy tests shall be conducted semiannually. The results of the semiannual calibration test shall be recorded in a log book.

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

6. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- for 1 full quarter the facility's visual observations indicate no visible emissions; and
- the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

7. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- f. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- g. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive cleanup material and/or any HAP-containing cleanup material was employed in this emissions unit. The notification shall include a copy of such record and shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the occurrence.
2. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the following:
 - a. the hourly and daily OC emission limitations for resins and gelcoats;
 - b. the daily OC emission limitation for cleanup materials;
 - c. the updated rolling, 12-month summation of the OC emissions from cleanup materials employed in emissions units P001-P006, combined;
 - d. the OC content limitation for cleanup material;
 - e. the styrene content limitation for resins and gelcoats; and
 - f. the lbs of OC/ton emission rates for resins and gelcoats.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
4. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services that specify the total particulate and OC emissions (from all coatings employed (resins and gelcoats)) from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
5. The permittee shall submit to the Hamilton County Department of Environmental Services the results of the semiannual calibration and accuracy tests for metering equipment, these results shall be submitted by January 30 and July 30 of each year and cover the previous semiannual calibration and accuracy test.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from any stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.
7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive PE were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations and operational restrictions specified in Sections A.I.1, A.I.2 and A.II shall be determined by the following methods:

1.a Emission Limitations: 8 lbs/hr of OC emissions from resins and gelcoats employed; 40 lbs/day of OC emissions from resin and gelcoats employed

Applicable Compliance Method: Compliance with the hourly OC emission limitation may be determined by the record keeping requirements specified in Section A.III.1.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 18, and/or 25.

Compliance with the daily OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.1.

1.b Emission Limitation: 7.3 TPY of OC emissions from resins and gelcoats employed

Applicable Compliance Method: Compliance with the annual OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.4.

1.c Emission Limitations: OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed 250 lbs of OC emissions/day and 45.63 TPY based on a rolling, 12-month summation.

Applicable Compliance Method: Compliance with the daily and TPY OC emission limitations shall be determined by the record keeping requirements specified in Sections A.III.2 and A.III.3, respectively.

1.d Emission Limitation: 6.6 lbs of OC/gallon, for the cleanup material(s)

Applicable Compliance Method: Compliance with the OC content limitation shall be determined by the record keeping requirements specified in Section A.III.2. Formulation data or U.S. EPA Method 24 shall be used to determine the OC content of any cleanup material employed in this emissions unit.

1.e Emission Limitation: Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.f Emission Limitation: Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

V. Testing Requirements (continued)

1.g Emission Limitations: 1.55 lbs of PE/hour and 6.78 TPY of PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations may be demonstrated using the following equations from the Draft Guide for the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [Cae/100] \times [1 - Coe/100]$, where:

E = PE emission rate, lbs/hr

M = usage rate of material sprayed, lbs/hr

S = solids content (%)

De = Deposition efficiency of material on surfaces*

Cae = PE capture efficiency of process ventilation system*

Coe = PE control efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: (238.1 lbs of gelcoat/hr x 53/100 gelcoat solids content x (1 - 99/100) x (80/100) x (1 - 0/100)) = 1.01 lbs of PE/hr vented to stacks

If required, the permittee shall demonstrate compliance with the hourly PE limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

* The deposition efficiency figure and capture efficiency figure used in this equation are provided by the Composite Fabricators Association. The control efficiency figure is 0% based on uncontrolled process ventilation systems (i.e., no filtration/removal of PE).

(1.01 lbs of PE/hr x 8,760 hr/year)/2,000 lbs/ton = 4.42 TPY of PE

1.h Emission Limitations: 2.94 lbs of fugitive PE/hour and 12.88 TPY of fugitive PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations shall be demonstrated using the following equations from the Draft Guide to the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [1 - Cae/100]$, where:

E = PE emission rate, lbs/hr

M = usage rate of material sprayed, lbs/hr

S = solids content (%)

De = Deposition efficiency of material on surfaces*

Cae = PE Capture efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: [238.1 lbs of gelcoat/hr x (53/100) gelcoat solids content x (1 - 99/100) x (1 - 80/100)] = 0.25 lb of PE/hr as fugitive

* The deposition efficiency figure and capture efficiency figure used in this equation is provided by the Composite Fabricators Association.

(0.25 lb of PE/hr x 8,760 hrs/year)/2,000 lbs/ton = 1.10 TPY of PE as fugitive

V. Testing Requirements (continued)

- 1.i** Styrene Content Restrictions: 58%, by weight, for resins employed; 35%, by weight, for gelcoats employed

Applicable Compliance Method: Compliance with the styrene content restrictions shall be determined by the record keeping requirements specified in Section A.III.1.

- 1.j** Emission Limitations: the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed; the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of resin processed.

Applicable Compliance Method: Compliance with the OC emission rate limitations for resins and gelcoats shall be determined by the record keeping requirements specified in Section A.III.1.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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Station 1 - fiberglass tank fabrication
using spray, filament winding, and
hand layup

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials employed (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxics Emissions" policy ("Air Toxics Policy") was applied for each toxic pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant:

Pollutant: Styrene

TLV (ug/m3): 85,235

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 3,151.68

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 8,523.5

Pollutant: MMA

TLV (ug/m3): 204,703

Maximum Hourly Emission Rate (lbs/hr): 0.19

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 378.2

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 20,470.3

Pollutant: Acetone

TLV (ug/m3): 1,187,117

Maximum Hourly Emission Rate (lbs/hr): 100

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 113,268.7

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 118,711.7

Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxics Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxics Policy" will not be satisfied, the permittee shall not make the change. Changes that can affect the parameters used in the "Air Toxics Policy" include the following:

- a. changes in the composition of the materials used, or the use of new materials that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

If the permittee determines that the "Air Toxics Policy" will be satisfied with the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxics Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxics Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Station #2 (P002)

Activity Description: Winding, spray, and/or hand lay-up of corrosion resistant fiberglass tanks.

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>
Station 2 - fiberglass tank fabrication using spray, filament winding, and hand layup	OAC rule 3745-31-05(A)(3) (PTI 14-05356)	<p>7.3 tons per year (TPY) of organic compound (OC) emissions from coatings employed (resins and gelcoats)</p> <p>Fugitive particulate emissions (PE) from this emissions unit shall not exceed 2.94 lbs/hour*.</p> <p>6.78 TPY of PE from all stacks associated with this emissions unit*</p> <p>12.88 TPY of fugitive PE*</p> <p>*The PE limitations are greater than the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with these emission limitations.</p> <p>See Sections A.I.2.a and A.II below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-07(A)(1), 3745-17-07(B)(1), 3745-17-08(B), 3745-17-11(B)(1) and 40 CFR Part 63, Subpart WWWW.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-07(G)(2)	8 lbs of OC emissions/hour from coatings (resins and gelcoats)
		40 lbs of OC emissions/day from coatings (resins and gelcoats)
		See Section A.I.2.b below.
	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)(1)	Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	The current operating and maintenance practices associated with this emissions unit are sufficient to satisfy the reasonably available control measure requirements specified in OAC rule 3745-17-08(B).
	OAC rule 3745-17-11(B)(1) (Based on Table I)	1.55 lbs of PE/hour from all stacks associated with this emissions unit.*
		*The hourly PE limitation is greater than the emissions unit's potential to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with this emission limitation.
	40 CFR Part 63, Subpart WWWW	The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart WWWW (National Emission standards for Hazardous Air Pollutants : Reinforced Plastic Composites Production) as specified in Attachment A of this permit.

2. Additional Terms and Conditions

- 2.a** The total OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed the following:
 - i. 250 lbs of OC emissions/day; and
 - ii. 45.63 TPY of OC emissions as a rolling, 12-month summation.
- 2.b** Section A.II.4 prohibits the use of photochemically reactive cleanup materials in this emissions unit. Also, the OC emissions from nonphotochemically reactive cleanup materials do not count towards compliance with the hourly and daily emission limitations.

II. Operational Restrictions

1. The following limitations for resins employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 58%, by weight; and
 - b. the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed.
2. The following limitations for gelcoats employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 35%, by weight; and
 - b. the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of gelcoat processed.
3. The maximum OC content of each cleanup material employed in this emissions unit shall not exceed 6.6 lbs of OC/gallon.
4. The permittee shall not employ any photochemically reactive cleanup material in this emissions unit.
5. The cleanup materials employed in this emissions unit shall not contain any hazardous air pollutants (HAPs), as defined in Section 112(b) of the 1990 Clean Air Act Amendments.
6. The permittee shall keep containers that store any HAP materials and/or cleanup materials closed or covered except during the addition or removal of materials.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following resin and gelcoat usage information for each day this emissions unit is in operation:
 - a. the company identification for each resin and gelcoat employed;
 - b. the number of pounds of each resin and gelcoat employed;
 - c. the percent, by weight, styrene of each resin and gelcoat employed;
 - d. the calculated emission factor (in lbs of OC emissions/ton) for the resin or gelcoat processed using the guidance document from the Unified Emission Factor (UEF), Table 1 from the "Technical Discussion of the Unified Emission Factors for Open Molding of Composites, dated July 23, 2001 or the most recent update;
 - e. the total OC emissions for all resins and gelcoats employed, in pounds $[(b) \times (d)]$ for all gelcoats employed, plus $(b) \times (d)$ for all resins employed, $\times 1 \text{ ton}/2,000 \text{ lbs}$;
 - f. the total number of hours this emissions unit was in operation; and
 - g. the average hourly OC emission rate for all resins and gelcoats employed $[(e)/(f)]$.

Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

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

2. The permittee shall collect and record the following information each day for cleanup materials employed in emissions units P001-P006, combined:
 - a. the company identification for each cleanup material employed;
 - b. a record indicating whether or not the cleanup material is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5);
 - c. a record indicating whether or not the cleanup material contains any HAPs, as defined in Section 112(b) of the 1990 Clean Air Act Amendments;
 - d. the total number of gallons or pounds of each cleanup material employed in emissions units P001-P006, combined (Cleanup material employed is equal to [the amount of virgin material dispensed plus recycled cleanup material from the previous day] minus [the cleanup material left at the end of the day]. The permittee may record the use of cleanup material in pounds per day if the virgin and recycled cleanup material is weighed.);
 - e. the OC content of each cleanup material employed, in lbs of OC/gallon or lbs of OC/pound; and
 - f. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (the daily OC emissions from cleanup materials shall be calculated by multiplying the OC content recorded in line (e) by the number of gallons or pounds employed recorded in line (d)).
3. The permittee shall maintain records of the following information each month for emissions units P001-P006, combined:
 - a. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (i.e., the summation of A.III.2.f for all days of the calendar month);
 - b. the updated rolling, 12-month summation of OC emissions from all cleanup materials, in tons, from emissions units P001-P006, combined (i.e., the total OC emissions for the current month plus the OC emissions for the previous 11 calendar months and divided by 2,000 lbs/ton); and
 - c. the amount of cleanup material sent out for disposal and the solvent content of that cleanup material. (The solvent portion of any cleanup material sent out for disposal can be subtracted from the monthly cleanup material usage totals for emissions units P001-P006. The permittee shall retain records of cleanup material analyses for the solvent and solids content of cleanup materials sent out for disposal.)
4. The permittee shall maintain annual records of the total OC emissions, in tons, from all coatings (resins and gelcoats) employed.
5. The permittee shall operate metering equipment to measure the amount of all resins and gelcoats used in this emissions unit. The permittee shall calibrate the meters to measure the amount, in weight or volume, of all resins and gelcoats used in this emissions unit in accordance with the procedures specified by the manufacturer of the metering equipment as being necessary or appropriate to achieve the accuracy of the measurements guaranteed or specified by such manufacturer which accuracy shall be guaranteed or specified as being within plus or minus 5%. The calibration and accuracy tests shall be conducted semiannually. The results of the semiannual calibration test shall be recorded in a log book.

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

6. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- for 1 full quarter the facility's visual observations indicate no visible emissions; and
- the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

7. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- f. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- g. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive cleanup material and/or any HAP-containing cleanup material was employed in this emissions unit. The notification shall include a copy of such record and shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the occurrence.
2. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the following:
 - a. the hourly and daily OC emission limitations for resins and gelcoats;
 - b. the daily OC emission limitation for cleanup materials;
 - c. the updated rolling, 12-month summation of the OC emissions from cleanup materials employed in emissions units P001-P006, combined;
 - d. the OC content limitation for cleanup material;
 - e. the styrene content limitation for resins and gelcoats; and
 - f. the lbs of OC/ton emission rates for resins and gelcoats.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
4. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services that specify the total particulate and OC emissions (from all coatings employed (resins and gelcoats)) from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
5. The permittee shall submit to the Hamilton County Department of Environmental Services the results of the semiannual calibration and accuracy tests for metering equipment, these results shall be submitted by January 30 and July 30 of each year and cover the previous semiannual calibration and accuracy test.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from any stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.
7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive PE were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations and operational restrictions specified in Sections A.I.1, A.I.2 and A.II shall be determined by the following methods:

1.a Emission Limitations: 8 lbs/hr of OC emissions from resins and gelcoats employed; 40 lbs/day of OC emissions from resin and gelcoats employed

Applicable Compliance Method: Compliance with the hourly OC emission limitation may be determined by the record keeping requirements specified in Section A.III.1.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 18, and/or 25.

Compliance with the daily OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.1.

1.b Emission Limitation: 7.3 TPY of OC emissions from resins and gelcoats employed

Applicable Compliance Method: Compliance with the annual OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.4.

1.c Emission Limitations: OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed 250 lbs of OC emissions/day and 45.63 TPY based on a rolling, 12-month summation.

Applicable Compliance Method: Compliance with the daily and TPY OC emission limitations shall be determined by the record keeping requirements specified in Sections A.III.2 and A.III.3, respectively.

1.d Emission Limitation: 6.6 lbs of OC/gallon, for the cleanup material(s)

Applicable Compliance Method: Compliance with the OC content limitation shall be determined by the record keeping requirements specified in Section A.III.2. Formulation data or U.S. EPA Method 24 shall be used to determine the OC content of any cleanup material employed in this emissions unit.

1.e Emission Limitation: Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.f Emission Limitation: Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

V. Testing Requirements (continued)

1.g Emission Limitations: 1.55 lbs of PE/hour and 6.78 TPY of PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations may be demonstrated using the following equations from the Draft Guide for the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [Cae/100] \times [1 - Coe/100]$, where:

E = PE emission rate, lbs/hr

M = usage rate of material sprayed, lbs/hr

S = solids content (%)

De = Deposition efficiency of material on surfaces*

Cae = PE capture efficiency of process ventilation system*

Coe = PE control efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: (238.1 lbs of gelcoat/hr x 53/100 gelcoat solids content x (1 - 99/100) x (80/100) x (1 - 0/100)) = 1.01 lbs of PE/hr vented to stacks

If required, the permittee shall demonstrate compliance with the hourly PE limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

* The deposition efficiency figure and capture efficiency figure used in this equation are provided by the Composite Fabricators Association. The control efficiency figure is 0% based on uncontrolled process ventilation systems (i.e., no filtration/removal of PE).

(1.01 lbs of PE/hr x 8,760 hr/year)/2,000 lbs/ton = 4.42 TPY of PE

1.h Emission Limitations: 2.94 lbs of fugitive PE/hour and 12.88 TPY of fugitive PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations shall be demonstrated using the following equations from the Draft Guide to the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [1 - Cae/100]$, where:

E = PE emission rate, lbs/hr

M = usage rate of material sprayed, lbs/hr

S = solids content (%)

De = Deposition efficiency of material on surfaces*

Cae = PE Capture efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: [238.1 lbs of gelcoat/hr x (53/100) gelcoat solids content x (1 - 99/100) x (1 - 80/100)] = 0.25 lb of PE/hr as fugitive

* The deposition efficiency figure and capture efficiency figure used in this equation is provided by the Composite Fabricators Association.

(0.25 lb of PE/hr x 8,760 hrs/year)/2,000 lbs/ton = 1.10 TPY of PE as fugitive

V. Testing Requirements (continued)

- 1.i** Styrene Content Restrictions: 58%, by weight, for resins employed; 35%, by weight, for gelcoats employed

Applicable Compliance Method: Compliance with the styrene content restrictions shall be determined by the record keeping requirements specified in Section A.III.1.

- 1.j** Emission Limitations: the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed; the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of resin processed.

Applicable Compliance Method: Compliance with the OC emission rate limitations for resins and gelcoats shall be determined by the record keeping requirements specified in Section A.III.1.

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>
Station 2 - fiberglass tank fabrication using spray, filament winding, and hand layup		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials employed (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxics Emissions" policy ("Air Toxics Policy") was applied for each toxic pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant:

Pollutant: Styrene

TLV (ug/m3): 85,235

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 3,151.68

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 8,523.5

Pollutant: MMA

TLV (ug/m3): 204,703

Maximum Hourly Emission Rate (lbs/hr): 0.19

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 378.2

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 20,470.3

Pollutant: Acetone

TLV (ug/m3): 1,187,117

Maximum Hourly Emission Rate (lbs/hr): 100

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 113,268.7

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 118,711.7

Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxics Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxics Policy" will not be satisfied, the permittee shall not make the change. Changes that can affect the parameters used in the "Air Toxics Policy" include the following:

- a. changes in the composition of the materials used, or the use of new materials that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

If the permittee determines that the "Air Toxics Policy" will be satisfied with the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxics Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxics Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Station #3 (P003)

Activity Description: Winding, spray, and/or hand lay-up of corrosion resistant fiberglass tanks.

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>
Station 3 - fiberglass tank fabrication using spray, filament winding, and hand layup	OAC rule 3745-31-05(A)(3) (PTI 14-05356)	<p>7.3 tons per year (TPY) of organic compound (OC) emissions from coatings employed (resins and gelcoats)</p> <p>Fugitive particulate emissions (PE) from this emissions unit shall not exceed 2.94 lbs/hour*.</p> <p>6.78 TPY of PE from all stacks associated with this emissions unit*</p> <p>12.88 TPY of fugitive PE*</p> <p>*The PE limitations are greater than the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with these emission limitations.</p> <p>See Sections A.I.2.a and A.II below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-07(A)(1), 3745-17-07(B)(1), 3745-17-08(B), 3745-17-11(B)(1) and 40 CFR Part 63, Subpart WWWW.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-07(G)(2)	8 lbs of OC emissions/hour from coatings (resins and gelcoats) 40 lbs of OC emissions/day from coatings (resins and gelcoats)
	OAC rule 3745-17-07(A)	See Section A.I.2.b below. Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)(1)	Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	The current operating and maintenance practices associated with this emissions unit are sufficient to satisfy the reasonably available control measure requirements specified in OAC rule 3745-17-08(B).
	OAC rule 3745-17-11(B)(1) (Based on Table I)	1.55 lbs of PE/hour from all stacks associated with this emissions unit.* *The hourly PE limitation is greater than the emissions unit's potential to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with this emission limitation.
	40 CFR Part 63, Subpart WWWW	The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart WWWW (National Emission standards for Hazardous Air Pollutants : Reinforced Plastic Composites Production) as specified in Attachment A of this permit.

2. Additional Terms and Conditions

- 2.a** The total OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed the following:
- i. 250 lbs of OC emissions/day; and
 - ii. 45.63 TPY of OC emissions as a rolling, 12-month summation.
- 2.b** Section A.II.4 prohibits the use of photochemically reactive cleanup materials in this emissions unit. Also, the OC emissions from nonphotochemically reactive cleanup materials do not count towards compliance with the hourly and daily emission limitations.

II. Operational Restrictions

1. The following limitations for resins employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 58%, by weight; and
 - b. the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed.
2. The following limitations for gelcoats employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 35%, by weight; and
 - b. the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of gelcoat processed.
3. The maximum OC content of each cleanup material employed in this emissions unit shall not exceed 6.6 lbs of OC/gallon.
4. The permittee shall not employ any photochemically reactive cleanup material in this emissions unit.
5. The cleanup materials employed in this emissions unit shall not contain any hazardous air pollutants (HAPs), as defined in Section 112(b) of the 1990 Clean Air Act Amendments.
6. The permittee shall keep containers that store any HAP materials and/or cleanup materials closed or covered except during the addition or removal of materials.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following resin and gelcoat usage information for each day this emissions unit is in operation:
 - a. the company identification for each resin and gelcoat employed;
 - b. the number of pounds of each resin and gelcoat employed;
 - c. the percent, by weight, styrene of each resin and gelcoat employed;
 - d. the calculated emission factor (in lbs of OC emissions/ton) for the resin or gelcoat processed using the guidance document from the Unified Emission Factor (UEF), Table 1 from the "Technical Discussion of the Unified Emission Factors for Open Molding of Composites, dated July 23, 2001 or the most recent update;
 - e. the total OC emissions for all resins and gelcoats employed, in pounds $[(b) \times (d)]$ for all gelcoats employed, plus $(b) \times (d)$ for all resins employed, $\times 1 \text{ ton}/2,000 \text{ lbs}$;
 - f. the total number of hours this emissions unit was in operation; and
 - g. the average hourly OC emission rate for all resins and gelcoats employed $[(e)/(f)]$.

Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

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

2. The permittee shall collect and record the following information each day for cleanup materials employed in emissions units P001-P006, combined:
 - a. the company identification for each cleanup material employed;
 - b. a record indicating whether or not the cleanup material is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5);
 - c. a record indicating whether or not the cleanup material contains any HAPs, as defined in Section 112(b) of the 1990 Clean Air Act Amendments;
 - d. the total number of gallons or pounds of each cleanup material employed in emissions units P001-P006, combined (Cleanup material employed is equal to [the amount of virgin material dispensed plus recycled cleanup material from the previous day] minus [the cleanup material left at the end of the day]. The permittee may record the use of cleanup material in pounds per day if the virgin and recycled cleanup material is weighed.);
 - e. the OC content of each cleanup material employed, in lbs of OC/gallon or lbs of OC/pound; and
 - f. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (the daily OC emissions from cleanup materials shall be calculated by multiplying the OC content recorded in line (e) by the number of gallons or pounds employed recorded in line (d)).
3. The permittee shall maintain records of the following information each month for emissions units P001-P006, combined:
 - a. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (i.e., the summation of A.III.2.f for all days of the calendar month);
 - b. the updated rolling, 12-month summation of OC emissions from all cleanup materials, in tons, from emissions units P001-P006, combined (i.e., the total OC emissions for the current month plus the OC emissions for the previous 11 calendar months and divided by 2,000 lbs/ton); and
 - c. the amount of cleanup material sent out for disposal and the solvent content of that cleanup material. (The solvent portion of any cleanup material sent out for disposal can be subtracted from the monthly cleanup material usage totals for emissions units P001-P006. The permittee shall retain records of cleanup material analyses for the solvent and solids content of cleanup materials sent out for disposal.)
4. The permittee shall maintain annual records of the total OC emissions, in tons, from all coatings (resins and gelcoats) employed.
5. The permittee shall operate metering equipment to measure the amount of all resins and gelcoats used in this emissions unit. The permittee shall calibrate the meters to measure the amount, in weight or volume, of all resins and gelcoats used in this emissions unit in accordance with the procedures specified by the manufacturer of the metering equipment as being necessary or appropriate to achieve the accuracy of the measurements guaranteed or specified by such manufacturer which accuracy shall be guaranteed or specified as being within plus or minus 5%. The calibration and accuracy tests shall be conducted semiannually. The results of the semiannual calibration test shall be recorded in a log book.

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

6. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- for 1 full quarter the facility's visual observations indicate no visible emissions; and
- the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

7. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- f. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- g. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive cleanup material and/or any HAP-containing cleanup material was employed in this emissions unit. The notification shall include a copy of such record and shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the occurrence.
2. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the following:
 - a. the hourly and daily OC emission limitations for resins and gelcoats;
 - b. the daily OC emission limitation for cleanup materials;
 - c. the updated rolling, 12-month summation of the OC emissions from cleanup materials employed in emissions units P001-P006, combined;
 - d. the OC content limitation for cleanup material;
 - e. the styrene content limitation for resins and gelcoats; and
 - f. the lbs of OC/ton emission rates for resins and gelcoats.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
4. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services that specify the total particulate and OC emissions (from all coatings employed (resins and gelcoats)) from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
5. The permittee shall submit to the Hamilton County Department of Environmental Services the results of the semiannual calibration and accuracy tests for metering equipment, these results shall be submitted by January 30 and July 30 of each year and cover the previous semiannual calibration and accuracy test.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from any stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.
7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive PE were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations and operational restrictions specified in Sections A.I.1, A.I.2 and A.II shall be determined by the following methods:

1.a Emission Limitations: 8 lbs/hr of OC emissions from resins and gelcoats employed; 40 lbs/day of OC emissions from resin and gelcoats employed

Applicable Compliance Method: Compliance with the hourly OC emission limitation may be determined by the record keeping requirements specified in Section A.III.1.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 18, and/or 25.

Compliance with the daily OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.1.

1.b Emission Limitation: 7.3 TPY of OC emissions from resins and gelcoats employed

Applicable Compliance Method: Compliance with the annual OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.4.

1.c Emission Limitations: OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed 250 lbs of OC emissions/day and 45.63 TPY based on a rolling, 12-month summation.

Applicable Compliance Method: Compliance with the daily and TPY OC emission limitations shall be determined by the record keeping requirements specified in Sections A.III.2 and A.III.3, respectively.

1.d Emission Limitation: 6.6 lbs of OC/gallon, for the cleanup material(s)

Applicable Compliance Method: Compliance with the OC content limitation shall be determined by the record keeping requirements specified in Section A.III.2. Formulation data or U.S. EPA Method 24 shall be used to determine the OC content of any cleanup material employed in this emissions unit.

1.e Emission Limitation: Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.f Emission Limitation: Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

V. Testing Requirements (continued)

1.g Emission Limitations: 1.55 lbs of PE/hour and 6.78 TPY of PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations may be demonstrated using the following equations from the Draft Guide for the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [Cae/100] \times [1 - Coe/100]$, where:

E = PE emission rate, lbs/hr
M = usage rate of material sprayed, lbs/hr
S = solids content (%)
De = Deposition efficiency of material on surfaces*
Cae = PE capture efficiency of process ventilation system*
Coe = PE control efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: (238.1 lbs of gelcoat/hr x 53/100 gelcoat solids content x (1 - 99/100) x (80/100) x (1 - 0/100)) = 1.01 lbs of PE/hr vented to stacks

If required, the permittee shall demonstrate compliance with the hourly PE limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

* The deposition efficiency figure and capture efficiency figure used in this equation are provided by the Composite Fabricators Association. The control efficiency figure is 0% based on uncontrolled process ventilation systems (i.e., no filtration/removal of PE).

(1.01 lbs of PE/hr x 8,760 hr/year)/2,000 lbs/ton = 4.42 TPY of PE

1.h Emission Limitations: 2.94 lbs of fugitive PE/hour and 12.88 TPY of fugitive PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations shall be demonstrated using the following equations from the Draft Guide to the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [1 - Cae/100]$, where:

E = PE emission rate, lbs/hr
M = usage rate of material sprayed, lbs/hr
S = solids content (%)
De = Deposition efficiency of material on surfaces*
Cae = PE Capture efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: [238.1 lbs of gelcoat/hr x (53/100) gelcoat solids content x (1 - 99/100) x (1 - 80/100)] = 0.25 lb of PE/hr as fugitive

* The deposition efficiency figure and capture efficiency figure used in this equation is provided by the Composite Fabricators Association.

(0.25 lb of PE/hr x 8,760 hrs/year)/2,000 lbs/ton = 1.10 TPY of PE as fugitive

V. Testing Requirements (continued)

- 1.i** Styrene Content Restrictions: 58%, by weight, for resins employed; 35%, by weight, for gelcoats employed

Applicable Compliance Method: Compliance with the styrene content restrictions shall be determined by the record keeping requirements specified in Section A.III.1.

- 1.j** Emission Limitations: the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed; the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of resin processed.

Applicable Compliance Method: Compliance with the OC emission rate limitations for resins and gelcoats shall be determined by the record keeping requirements specified in Section A.III.1.

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.

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

Station 3 - fiberglass tank fabrication
using spray, filament winding, and
hand layup

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials employed (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxics Emissions" policy ("Air Toxics Policy") was applied for each toxic pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant:

Pollutant: Styrene

TLV (ug/m3): 85,235

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 3,151.68

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 8,523.5

Pollutant: MMA

TLV (ug/m3): 204,703

Maximum Hourly Emission Rate (lbs/hr): 0.19

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 378.2

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 20,470.3

Pollutant: Acetone

TLV (ug/m3): 1,187,117

Maximum Hourly Emission Rate (lbs/hr): 100

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 113,268.7

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 118,711.7

Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxics Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxics Policy" will not be satisfied, the permittee shall not make the change. Changes that can affect the parameters used in the "Air Toxics Policy" include the following:

- a. changes in the composition of the materials used, or the use of new materials that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

If the permittee determines that the "Air Toxics Policy" will be satisfied with the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxics Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxics Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Station #4 (P004)

Activity Description: Winding, spray, and/or hand lay-up of corrosion resistant fiberglass tanks.

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>
Station 4 - fiberglass tank fabrication using spray, filament winding, and hand layup	OAC rule 3745-31-05(A)(3) (PTI 14-05356)	<p>7.3 tons per year (TPY) of organic compound (OC) emissions from coatings employed (resins and gelcoats)</p> <p>Fugitive particulate emissions (PE) from this emissions unit shall not exceed 2.94 lbs/hour*.</p> <p>6.78 TPY of PE from all stacks associated with this emissions unit*</p> <p>12.88 TPY of fugitive PE*</p> <p>*The PE limitations are greater than the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with these emission limitations.</p> <p>See Sections A.I.2.a and A.II below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-07(A)(1), 3745-17-07(B)(1), 3745-17-08(B), 3745-17-11(B)(1) and 40 CFR Part 63, Subpart WWWW.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-07(G)(2)	8 lbs of OC emissions/hour from coatings (resins and gelcoats)
		40 lbs of OC emissions/day from coatings (resins and gelcoats)
		See Section A.I.2.b below.
	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)(1)	Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	The current operating and maintenance practices associated with this emissions unit are sufficient to satisfy the reasonably available control measure requirements specified in OAC rule 3745-17-08(B).
	OAC rule 3745-17-11(B)(1) (Based on Table I)	1.55 lbs of PE/hour from all stacks associated with this emissions unit.*
		*The hourly PE limitation is greater than the emissions unit's potential to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with this emission limitation.
	40 CFR Part 63, Subpart WWWW	The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart WWWW (National Emission standards for Hazardous Air Pollutants : Reinforced Plastic Composites Production) as specified in Attachment A of this permit.

2. Additional Terms and Conditions

- 2.a** The total OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed the following:
- i. 250 lbs of OC emissions/day; and
 - ii. 45.63 TPY of OC emissions as a rolling, 12-month summation.
- 2.b** Section A.II.4 prohibits the use of photochemically reactive cleanup materials in this emissions unit. Also, the OC emissions from nonphotochemically reactive cleanup materials do not count towards compliance with the hourly and daily emission limitations.

II. Operational Restrictions

1. The following limitations for resins employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 58%, by weight; and
 - b. the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed.
2. The following limitations for gelcoats employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 35%, by weight; and
 - b. the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of gelcoat processed.
3. The maximum OC content of each cleanup material employed in this emissions unit shall not exceed 6.6 lbs of OC/gallon.
4. The permittee shall not employ any photochemically reactive cleanup material in this emissions unit.
5. The cleanup materials employed in this emissions unit shall not contain any hazardous air pollutants (HAPs), as defined in Section 112(b) of the 1990 Clean Air Act Amendments.
6. The permittee shall keep containers that store any HAP materials and/or cleanup materials closed or covered except during the addition or removal of materials.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following resin and gelcoat usage information for each day this emissions unit is in operation:
 - a. the company identification for each resin and gelcoat employed;
 - b. the number of pounds of each resin and gelcoat employed;
 - c. the percent, by weight, styrene of each resin and gelcoat employed;
 - d. the calculated emission factor (in lbs of OC emissions/ton) for the resin or gelcoat processed using the guidance document from the Unified Emission Factor (UEF), Table 1 from the "Technical Discussion of the Unified Emission Factors for Open Molding of Composites, dated July 23, 2001 or the most recent update;
 - e. the total OC emissions for all resins and gelcoats employed, in pounds $[(b) \times (d)]$ for all gelcoats employed, plus $(b) \times (d)$ for all resins employed, $\times 1 \text{ ton}/2,000 \text{ lbs}$;
 - f. the total number of hours this emissions unit was in operation; and
 - g. the average hourly OC emission rate for all resins and gelcoats employed $[(e)/(f)]$.

Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

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

2. The permittee shall collect and record the following information each day for cleanup materials employed in emissions units P001-P006, combined:
 - a. the company identification for each cleanup material employed;
 - b. a record indicating whether or not the cleanup material is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5);
 - c. a record indicating whether or not the cleanup material contains any HAPs, as defined in Section 112(b) of the 1990 Clean Air Act Amendments;
 - d. the total number of gallons or pounds of each cleanup material employed in emissions units P001-P006, combined (Cleanup material employed is equal to [the amount of virgin material dispensed plus recycled cleanup material from the previous day] minus [the cleanup material left at the end of the day]. The permittee may record the use of cleanup material in pounds per day if the virgin and recycled cleanup material is weighed.);
 - e. the OC content of each cleanup material employed, in lbs of OC/gallon or lbs of OC/pound; and
 - f. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (the daily OC emissions from cleanup materials shall be calculated by multiplying the OC content recorded in line (e) by the number of gallons or pounds employed recorded in line (d)).
3. The permittee shall maintain records of the following information each month for emissions units P001-P006, combined:
 - a. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (i.e., the summation of A.III.2.f for all days of the calendar month);
 - b. the updated rolling, 12-month summation of OC emissions from all cleanup materials, in tons, from emissions units P001-P006, combined (i.e., the total OC emissions for the current month plus the OC emissions for the previous 11 calendar months and divided by 2,000 lbs/ton); and
 - c. the amount of cleanup material sent out for disposal and the solvent content of that cleanup material. (The solvent portion of any cleanup material sent out for disposal can be subtracted from the monthly cleanup material usage totals for emissions units P001-P006. The permittee shall retain records of cleanup material analyses for the solvent and solids content of cleanup materials sent out for disposal.)
4. The permittee shall maintain annual records of the total OC emissions, in tons, from all coatings (resins and gelcoats) employed.
5. The permittee shall operate metering equipment to measure the amount of all resins and gelcoats used in this emissions unit. The permittee shall calibrate the meters to measure the amount, in weight or volume, of all resins and gelcoats used in this emissions unit in accordance with the procedures specified by the manufacturer of the metering equipment as being necessary or appropriate to achieve the accuracy of the measurements guaranteed or specified by such manufacturer which accuracy shall be guaranteed or specified as being within plus or minus 5%. The calibration and accuracy tests shall be conducted semiannually. The results of the semiannual calibration test shall be recorded in a log book.

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

6. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- for 1 full quarter the facility's visual observations indicate no visible emissions; and
- the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

7. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- f. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- g. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive cleanup material and/or any HAP-containing cleanup material was employed in this emissions unit. The notification shall include a copy of such record and shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the occurrence.
2. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the following:
 - a. the hourly and daily OC emission limitations for resins and gelcoats;
 - b. the daily OC emission limitation for cleanup materials;
 - c. the updated rolling, 12-month summation of the OC emissions from cleanup materials employed in emissions units P001-P006, combined;
 - d. the OC content limitation for cleanup material;
 - e. the styrene content limitation for resins and gelcoats; and
 - f. the lbs of OC/ton emission rates for resins and gelcoats.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
4. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services that specify the total particulate and OC emissions (from all coatings employed (resins and gelcoats)) from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
5. The permittee shall submit to the Hamilton County Department of Environmental Services the results of the semiannual calibration and accuracy tests for metering equipment, these results shall be submitted by January 30 and July 30 of each year and cover the previous semiannual calibration and accuracy test.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from any stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.
7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive PE were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations and operational restrictions specified in Sections A.I.1, A.I.2 and A.II shall be determined by the following methods:

1.a Emission Limitations: 8 lbs/hr of OC emissions from resins and gelcoats employed; 40 lbs/day of OC emissions from resin and gelcoats employed

Applicable Compliance Method: Compliance with the hourly OC emission limitation may be determined by the record keeping requirements specified in Section A.III.1.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 18, and/or 25.

Compliance with the daily OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.1.

1.b Emission Limitation: 7.3 TPY of OC emissions from resins and gelcoats employed

Applicable Compliance Method: Compliance with the annual OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.4.

1.c Emission Limitations: OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed 250 lbs of OC emissions/day and 45.63 TPY based on a rolling, 12-month summation.

Applicable Compliance Method: Compliance with the daily and TPY OC emission limitations shall be determined by the record keeping requirements specified in Sections A.III.2 and A.III.3, respectively.

1.d Emission Limitation: 6.6 lbs of OC/gallon, for the cleanup material(s)

Applicable Compliance Method: Compliance with the OC content limitation shall be determined by the record keeping requirements specified in Section A.III.2. Formulation data or U.S. EPA Method 24 shall be used to determine the OC content of any cleanup material employed in this emissions unit.

1.e Emission Limitation: Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.f Emission Limitation: Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

V. Testing Requirements (continued)

1.g Emission Limitations: 1.55 lbs of PE/hour and 6.78 TPY of PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations may be demonstrated using the following equations from the Draft Guide for the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [Cae/100] \times [1 - Coe/100]$, where:

E = PE emission rate, lbs/hr
M = usage rate of material sprayed, lbs/hr
S = solids content (%)
De = Deposition efficiency of material on surfaces*
Cae = PE capture efficiency of process ventilation system*
Coe = PE control efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: (238.1 lbs of gelcoat/hr x 53/100 gelcoat solids content x (1 - 99/100) x (80/100) x (1 - 0/100)) = 1.01 lbs of PE/hr vented to stacks

If required, the permittee shall demonstrate compliance with the hourly PE limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

* The deposition efficiency figure and capture efficiency figure used in this equation are provided by the Composite Fabricators Association. The control efficiency figure is 0% based on uncontrolled process ventilation systems (i.e., no filtration/removal of PE).

$(1.01 \text{ lbs of PE/hr} \times 8,760 \text{ hr/year})/2,000 \text{ lbs/ton} = 4.42 \text{ TPY of PE}$

1.h Emission Limitations: 2.94 lbs of fugitive PE/hour and 12.88 TPY of fugitive PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations shall be demonstrated using the following equations from the Draft Guide to the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [1 - Cae/100]$, where:

E = PE emission rate, lbs/hr
M = usage rate of material sprayed, lbs/hr
S = solids content (%)
De = Deposition efficiency of material on surfaces*
Cae = PE Capture efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: [238.1 lbs of gelcoat/hr x (53/100) gelcoat solids content x (1 - 99/100) x (1 - 80/100)] = 0.25 lb of PE/hr as fugitive

* The deposition efficiency figure and capture efficiency figure used in this equation is provided by the Composite Fabricators Association.

$(0.25 \text{ lb of PE/hr} \times 8,760 \text{ hrs/year})/2,000 \text{ lbs/ton} = 1.10 \text{ TPY of PE as fugitive}$

V. Testing Requirements (continued)

- 1.i** Styrene Content Restrictions: 58%, by weight, for resins employed; 35%, by weight, for gelcoats employed

Applicable Compliance Method: Compliance with the styrene content restrictions shall be determined by the record keeping requirements specified in Section A.III.1.

- 1.j** Emission Limitations: the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed; the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of resin processed.

Applicable Compliance Method: Compliance with the OC emission rate limitations for resins and gelcoats shall be determined by the record keeping requirements specified in Section A.III.1.

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>
Station 4 - fiberglass tank fabrication using spray, filament winding, and hand layup		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials employed (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxics Emissions" policy ("Air Toxics Policy") was applied for each toxic pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant:

Pollutant: Styrene

TLV (ug/m3): 85,235

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 3,151.68

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 8,523.5

Pollutant: MMA

TLV (ug/m3): 204,703

Maximum Hourly Emission Rate (lbs/hr): 0.19

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 378.2

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 20,470.3

Pollutant: Acetone

TLV (ug/m3): 1,187,117

Maximum Hourly Emission Rate (lbs/hr): 100

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 113,268.7

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 118,711.7

Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxics Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxics Policy" will not be satisfied, the permittee shall not make the change. Changes that can affect the parameters used in the "Air Toxics Policy" include the following:

- a. changes in the composition of the materials used, or the use of new materials that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

If the permittee determines that the "Air Toxics Policy" will be satisfied with the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxics Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxics Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Station #5 (P005)
Activity Description: Spray and/or hand lay-up of pipe and dish (covers)

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>
Station 5 - fiberglass tank fabrication using spray, filament winding, and hand layup	OAC rule 3745-31-05(A)(3) (PTI 14-05356)	<p>7.3 tons per year (TPY) of organic compound (OC) emissions from coatings employed (resins and gelcoats)</p> <p>Fugitive particulate emissions (PE) from this emissions unit shall not exceed 2.94 lbs/hour*.</p> <p>6.78 TPY of PE from all stacks associated with this emissions unit*</p> <p>12.88 TPY of fugitive PE*</p> <p>*The PE limitations are greater than the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with these emission limitations.</p> <p>See Sections A.I.2.a and A.II below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-07(A)(1), 3745-17-07(B)(1), 3745-17-08(B), 3745-17-11(B)(1) and 40 CFR Part 63, Subpart WWWW.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-07(G)(2)	8 lbs of OC emissions/hour from coatings (resins and gelcoats) 40 lbs of OC emissions/day from coatings (resins and gelcoats)
	OAC rule 3745-17-07(A)	See Section A.I.2.b below. Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)(1)	Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	The current operating and maintenance practices associated with this emissions unit are sufficient to satisfy the reasonably available control measure requirements specified in OAC rule 3745-17-08(B).
	OAC rule 3745-17-11(B)(1) (Based on Table I)	1.55 lbs of PE/hour from all stacks associated with this emissions unit.* *The hourly PE limitation is greater than the emissions unit's potential to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with this emission limitation.
	40 CFR Part 63, Subpart WWWW	The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart WWWW (National Emission standards for Hazardous Air Pollutants : Reinforced Plastic Composites Production) as specified in Attachment A of this permit.

2. Additional Terms and Conditions

- 2.a** The total OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed the following:
- i. 250 lbs of OC emissions/day; and
 - ii. 45.63 TPY of OC emissions as a rolling, 12-month summation.
- 2.b** Section A.II.4 prohibits the use of photochemically reactive cleanup materials in this emissions unit. Also, the OC emissions from nonphotochemically reactive cleanup materials do not count towards compliance with the hourly and daily emission limitations.

II. Operational Restrictions

1. The following limitations for resins employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 58%, by weight; and
 - b. the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed.
2. The following limitations for gelcoats employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 35%, by weight; and
 - b. the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of gelcoat processed.
3. The maximum OC content of each cleanup material employed in this emissions unit shall not exceed 6.6 lbs of OC/gallon.
4. The permittee shall not employ any photochemically reactive cleanup material in this emissions unit.
5. The cleanup materials employed in this emissions unit shall not contain any hazardous air pollutants (HAPs), as defined in Section 112(b) of the 1990 Clean Air Act Amendments.
6. The permittee shall keep containers that store any HAP materials and/or cleanup materials closed or covered except during the addition or removal of materials.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following resin and gelcoat usage information for each day this emissions unit is in operation:
 - a. the company identification for each resin and gelcoat employed;
 - b. the number of pounds of each resin and gelcoat employed;
 - c. the percent, by weight, styrene of each resin and gelcoat employed;
 - d. the calculated emission factor (in lbs of OC emissions/ton) for the resin or gelcoat processed using the guidance document from the Unified Emission Factor (UEF), Table 1 from the "Technical Discussion of the Unified Emission Factors for Open Molding of Composites, dated July 23, 2001 or the most recent update;
 - e. the total OC emissions for all resins and gelcoats employed, in pounds $[(b) \times (d)]$ for all gelcoats employed, plus $(b) \times (d)$ for all resins employed, $\times 1 \text{ ton}/2,000 \text{ lbs}$;
 - f. the total number of hours this emissions unit was in operation; and
 - g. the average hourly OC emission rate for all resins and gelcoats employed $[(e)/(f)]$.

Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

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

2. The permittee shall collect and record the following information each day for cleanup materials employed in emissions units P001-P006, combined:
 - a. the company identification for each cleanup material employed;
 - b. a record indicating whether or not the cleanup material is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5);
 - c. a record indicating whether or not the cleanup material contains any HAPs, as defined in Section 112(b) of the 1990 Clean Air Act Amendments;
 - d. the total number of gallons or pounds of each cleanup material employed in emissions units P001-P006, combined (Cleanup material employed is equal to [the amount of virgin material dispensed plus recycled cleanup material from the previous day] minus [the cleanup material left at the end of the day]. The permittee may record the use of cleanup material in pounds per day if the virgin and recycled cleanup material is weighed.);
 - e. the OC content of each cleanup material employed, in lbs of OC/gallon or lbs of OC/pound; and
 - f. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (the daily OC emissions from cleanup materials shall be calculated by multiplying the OC content recorded in line (e) by the number of gallons or pounds employed recorded in line (d)).
3. The permittee shall maintain records of the following information each month for emissions units P001-P006, combined:
 - a. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (i.e., the summation of A.III.2.f for all days of the calendar month);
 - b. the updated rolling, 12-month summation of OC emissions from all cleanup materials, in tons, from emissions units P001-P006, combined (i.e., the total OC emissions for the current month plus the OC emissions for the previous 11 calendar months and divided by 2,000 lbs/ton); and
 - c. the amount of cleanup material sent out for disposal and the solvent content of that cleanup material. (The solvent portion of any cleanup material sent out for disposal can be subtracted from the monthly cleanup material usage totals for emissions units P001-P006. The permittee shall retain records of cleanup material analyses for the solvent and solids content of cleanup materials sent out for disposal.)
4. The permittee shall maintain annual records of the total OC emissions, in tons, from all coatings (resins and gelcoats) employed.
5. The permittee shall operate metering equipment to measure the amount of all resins and gelcoats used in this emissions unit. The permittee shall calibrate the meters to measure the amount, in weight or volume, of all resins and gelcoats used in this emissions unit in accordance with the procedures specified by the manufacturer of the metering equipment as being necessary or appropriate to achieve the accuracy of the measurements guaranteed or specified by such manufacturer which accuracy shall be guaranteed or specified as being within plus or minus 5%. The calibration and accuracy tests shall be conducted semiannually. The results of the semiannual calibration test shall be recorded in a log book.

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

6. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- for 1 full quarter the facility's visual observations indicate no visible emissions; and
- the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

7. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- f. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- g. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive cleanup material and/or any HAP-containing cleanup material was employed in this emissions unit. The notification shall include a copy of such record and shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the occurrence.
2. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the following:
 - a. the hourly and daily OC emission limitations for resins and gelcoats;
 - b. the daily OC emission limitation for cleanup materials;
 - c. the updated rolling, 12-month summation of the OC emissions from cleanup materials employed in emissions units P001-P006, combined;
 - d. the OC content limitation for cleanup material;
 - e. the styrene content limitation for resins and gelcoats; and
 - f. the lbs of OC/ton emission rates for resins and gelcoats.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
4. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services that specify the total particulate and OC emissions (from all coatings employed (resins and gelcoats)) from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
5. The permittee shall submit to the Hamilton County Department of Environmental Services the results of the semiannual calibration and accuracy tests for metering equipment, these results shall be submitted by January 30 and July 30 of each year and cover the previous semiannual calibration and accuracy test.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from any stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.
7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive PE were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations and operational restrictions specified in Sections A.I.1, A.I.2 and A.II shall be determined by the following methods:

1.a Emission Limitations: 8 lbs/hr of OC emissions from resins and gelcoats employed; 40 lbs/day of OC emissions from resin and gelcoats employed

Applicable Compliance Method: Compliance with the hourly OC emission limitation may be determined by the record keeping requirements specified in Section A.III.1.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 18, and/or 25.

Compliance with the daily OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.1.

1.b Emission Limitation: 7.3 TPY of OC emissions from resins and gelcoats employed

Applicable Compliance Method: Compliance with the annual OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.4.

1.c Emission Limitations: OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed 250 lbs of OC emissions/day and 45.63 TPY based on a rolling, 12-month summation.

Applicable Compliance Method: Compliance with the daily and TPY OC emission limitations shall be determined by the record keeping requirements specified in Sections A.III.2 and A.III.3, respectively.

1.d Emission Limitation: 6.6 lbs of OC/gallon, for the cleanup material(s)

Applicable Compliance Method: Compliance with the OC content limitation shall be determined by the record keeping requirements specified in Section A.III.2. Formulation data or U.S. EPA Method 24 shall be used to determine the OC content of any cleanup material employed in this emissions unit.

1.e Emission Limitation: Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.f Emission Limitation: Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

V. Testing Requirements (continued)

1.g Emission Limitations: 1.55 lbs of PE/hour and 6.78 TPY of PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations may be demonstrated using the following equations from the Draft Guide for the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [Cae/100] \times [1 - Coe/100]$, where:

E = PE emission rate, lbs/hr

M = usage rate of material sprayed, lbs/hr

S = solids content (%)

De = Deposition efficiency of material on surfaces*

Cae = PE capture efficiency of process ventilation system*

Coe = PE control efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: (238.1 lbs of gelcoat/hr x 53/100 gelcoat solids content x (1 - 99/100) x (80/100) x (1 - 0/100)) = 1.01 lbs of PE/hr vented to stacks

If required, the permittee shall demonstrate compliance with the hourly PE limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

* The deposition efficiency figure and capture efficiency figure used in this equation are provided by the Composite Fabricators Association. The control efficiency figure is 0% based on uncontrolled process ventilation systems (i.e., no filtration/removal of PE).

(1.01 lbs of PE/hr x 8,760 hr/year)/2,000 lbs/ton = 4.42 TPY of PE

1.h Emission Limitations: 2.94 lbs of fugitive PE/hour and 12.88 TPY of fugitive PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations shall be demonstrated using the following equations from the Draft Guide to the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [1 - Cae/100]$, where:

E = PE emission rate, lbs/hr

M = usage rate of material sprayed, lbs/hr

S = solids content (%)

De = Deposition efficiency of material on surfaces*

Cae = PE Capture efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: [238.1 lbs of gelcoat/hr x (53/100) gelcoat solids content x (1 - 99/100) x (1 - 80/100)] = 0.25 lb of PE/hr as fugitive

* The deposition efficiency figure and capture efficiency figure used in this equation is provided by the Composite Fabricators Association.

(0.25 lb of PE/hr x 8,760 hrs/year)/2,000 lbs/ton = 1.10 TPY of PE as fugitive

V. Testing Requirements (continued)

- 1.i** Styrene Content Restrictions: 58%, by weight, for resins employed; 35%, by weight, for gelcoats employed

Applicable Compliance Method: Compliance with the styrene content restrictions shall be determined by the record keeping requirements specified in Section A.III.1.

- 1.j** Emission Limitations: the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed; the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of resin processed.

Applicable Compliance Method: Compliance with the OC emission rate limitations for resins and gelcoats shall be determined by the record keeping requirements specified in Section A.III.1.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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Station 5 - fiberglass tank fabrication
using spray, filament winding, and
hand layup

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials employed (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxics Emissions" policy ("Air Toxics Policy") was applied for each toxic pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant:

Pollutant: Styrene

TLV (ug/m3): 85,235

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 3,151.68

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 8,523.5

Pollutant: MMA

TLV (ug/m3): 204,703

Maximum Hourly Emission Rate (lbs/hr): 0.19

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 378.2

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 20,470.3

Pollutant: Acetone

TLV (ug/m3): 1,187,117

Maximum Hourly Emission Rate (lbs/hr): 100

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 113,268.7

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 118,711.7

Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxics Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxics Policy" will not be satisfied, the permittee shall not make the change. Changes that can affect the parameters used in the "Air Toxics Policy" include the following:

- a. changes in the composition of the materials used, or the use of new materials that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

If the permittee determines that the "Air Toxics Policy" will be satisfied with the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxics Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxics Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Station #6 (P006)

Activity Description: Nozzle and appurtence-making via spray/hand lay-up and installation (finish & final inspection)

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>
Station 6 - fiberglass tank fabrication using spray, filament winding, and hand layup	OAC rule 3745-31-05(A)(3) (PTI 14-05356)	<p>7.3 tons per year (TPY) of organic compound (OC) emissions from coatings employed (resins and gelcoats)</p> <p>Fugitive particulate emissions (PE) from this emissions unit shall not exceed 2.94 lbs/hour*.</p> <p>6.78 TPY of PE from all stacks associated with this emissions unit*</p> <p>12.88 TPY of fugitive PE*</p> <p>*The PE limitations are greater than the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with these emission limitations.</p> <p>See Sections A.I.2.a and A.II below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-07(A)(1), 3745-17-07(B)(1), 3745-17-08(B), 3745-17-11(B)(1) and 40 CFR Part 63, Subpart WWWW.</p>

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-07(G)(2)	8 lbs of OC emissions/hour from coatings (resins and gelcoats) 40 lbs of OC emissions/day from coatings (resins and gelcoats)
	OAC rule 3745-17-07(A)	See Section A.I.2.b below. Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)(1)	Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	The current operating and maintenance practices associated with this emissions unit are sufficient to satisfy the reasonably available control measure requirements specified in OAC rule 3745-17-08(B).
	OAC rule 3745-17-11(B)(1) (Based on Table I)	1.55 lbs of PE/hour from all stacks associated with this emissions unit.* *The hourly PE limitation is greater than the emissions unit's potential to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping, or reporting requirements to ensure compliance with this emission limitation.
	40 CFR Part 63, Subpart WWWW	The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart WWWW (National Emission standards for Hazardous Air Pollutants : Reinforced Plastic Composites Production) as specified in Attachment A of this permit.

2. Additional Terms and Conditions

- 2.a** The total OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed the following:
- i. 250 lbs of OC emissions/day; and
 - ii. 45.63 TPY of OC emissions as a rolling, 12-month summation.
- 2.b** Section A.II.4 prohibits the use of photochemically reactive cleanup materials in this emissions unit. Also, the OC emissions from nonphotochemically reactive cleanup materials do not count towards compliance with the hourly and daily emission limitations.

II. Operational Restrictions

1. The following limitations for resins employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 58%, by weight; and
 - b. the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed.
2. The following limitations for gelcoats employed in this emissions unit shall not be exceeded:
 - a. the maximum styrene content shall not exceed 35%, by weight; and
 - b. the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of gelcoat processed.
3. The maximum OC content of each cleanup material employed in this emissions unit shall not exceed 6.6 lbs of OC/gallon.
4. The permittee shall not employ any photochemically reactive cleanup material in this emissions unit.
5. The cleanup materials employed in this emissions unit shall not contain any hazardous air pollutants (HAPs), as defined in Section 112(b) of the 1990 Clean Air Act Amendments.
6. The permittee shall keep containers that store any HAP materials and/or cleanup materials closed or covered except during the addition or removal of materials.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following resin and gelcoat usage information for each day this emissions unit is in operation:
 - a. the company identification for each resin and gelcoat employed;
 - b. the number of pounds of each resin and gelcoat employed;
 - c. the percent, by weight, styrene of each resin and gelcoat employed;
 - d. the calculated emission factor (in lbs of OC emissions/ton) for the resin or gelcoat processed using the guidance document from the Unified Emission Factor (UEF), Table 1 from the "Technical Discussion of the Unified Emission Factors for Open Molding of Composites, dated July 23, 2001 or the most recent update;
 - e. the total OC emissions for all resins and gelcoats employed, in pounds $[(b) \times (d)]$ for all gelcoats employed, plus $(b) \times (d)$ for all resins employed, $\times 1 \text{ ton}/2,000 \text{ lbs}$;
 - f. the total number of hours this emissions unit was in operation; and
 - g. the average hourly OC emission rate for all resins and gelcoats employed $[(e)/(f)]$.

Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

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

2. The permittee shall collect and record the following information each day for cleanup materials employed in emissions units P001-P006, combined:
 - a. the company identification for each cleanup material employed;
 - b. a record indicating whether or not the cleanup material is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5);
 - c. a record indicating whether or not the cleanup material contains any HAPs, as defined in Section 112(b) of the 1990 Clean Air Act Amendments;
 - d. the total number of gallons or pounds of each cleanup material employed in emissions units P001-P006, combined (Cleanup material employed is equal to [the amount of virgin material dispensed plus recycled cleanup material from the previous day] minus [the cleanup material left at the end of the day]. The permittee may record the use of cleanup material in pounds per day if the virgin and recycled cleanup material is weighed.);
 - e. the OC content of each cleanup material employed, in lbs of OC/gallon or lbs of OC/pound; and
 - f. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (the daily OC emissions from cleanup materials shall be calculated by multiplying the OC content recorded in line (e) by the number of gallons or pounds employed recorded in line (d)).
3. The permittee shall maintain records of the following information each month for emissions units P001-P006, combined:
 - a. the total OC emissions, in lbs, from all cleanup materials employed in emissions units P001-P006, combined (i.e., the summation of A.III.2.f for all days of the calendar month);
 - b. the updated rolling, 12-month summation of OC emissions from all cleanup materials, in tons, from emissions units P001-P006, combined (i.e., the total OC emissions for the current month plus the OC emissions for the previous 11 calendar months and divided by 2,000 lbs/ton); and
 - c. the amount of cleanup material sent out for disposal and the solvent content of that cleanup material. (The solvent portion of any cleanup material sent out for disposal can be subtracted from the monthly cleanup material usage totals for emissions units P001-P006. The permittee shall retain records of cleanup material analyses for the solvent and solids content of cleanup materials sent out for disposal.)
4. The permittee shall maintain annual records of the total OC emissions, in tons, from all coatings (resins and gelcoats) employed.
5. The permittee shall operate metering equipment to measure the amount of all resins and gelcoats used in this emissions unit. The permittee shall calibrate the meters to measure the amount, in weight or volume, of all resins and gelcoats used in this emissions unit in accordance with the procedures specified by the manufacturer of the metering equipment as being necessary or appropriate to achieve the accuracy of the measurements guaranteed or specified by such manufacturer which accuracy shall be guaranteed or specified as being within plus or minus 5%. The calibration and accuracy tests shall be conducted semiannually. The results of the semiannual calibration test shall be recorded in a log book.

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

6. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- for 1 full quarter the facility's visual observations indicate no visible emissions; and
- the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

7. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

Notwithstanding the frequency of reporting requirements specified in Section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit from weekly to monthly readings if the following conditions are met:

- f. for 1 full quarter the facility's visual observations indicate no visible emissions; and
- g. the permittee continues to comply with all the record keeping and monitoring requirements specified above.

The permittee shall revert to weekly readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive cleanup material and/or any HAP-containing cleanup material was employed in this emissions unit. The notification shall include a copy of such record and shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the occurrence.
2. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services that identify all exceedances of the following:
 - a. the hourly and daily OC emission limitations for resins and gelcoats;
 - b. the daily OC emission limitation for cleanup materials;
 - c. the updated rolling, 12-month summation of the OC emissions from cleanup materials employed in emissions units P001-P006, combined;
 - d. the OC content limitation for cleanup material;
 - e. the styrene content limitation for resins and gelcoats; and
 - f. the lbs of OC/ton emission rates for resins and gelcoats.
3. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.
4. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services that specify the total particulate and OC emissions (from all coatings employed (resins and gelcoats)) from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
5. The permittee shall submit to the Hamilton County Department of Environmental Services the results of the semiannual calibration and accuracy tests for metering equipment, these results shall be submitted by January 30 and July 30 of each year and cover the previous semiannual calibration and accuracy test.
6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from any stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.
7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive PE were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive PE. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations and operational restrictions specified in Sections A.I.1, A.I.2 and A.II shall be determined by the following methods:

1.a Emission Limitations: 8 lbs/hr of OC emissions from resins and gelcoats employed; 40 lbs/day of OC emissions from resin and gelcoats employed

Applicable Compliance Method: Compliance with the hourly OC emission limitation may be determined by the record keeping requirements specified in Section A.III.1.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, 18, and/or 25.

Compliance with the daily OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.1.

1.b Emission Limitation: 7.3 TPY of OC emissions from resins and gelcoats employed

Applicable Compliance Method: Compliance with the annual OC emission limitation shall be determined by the record keeping requirements specified in Section A.III.4.

1.c Emission Limitations: OC emissions from cleanup materials employed in emissions units P001-P006, combined, shall not exceed 250 lbs of OC emissions/day and 45.63 TPY based on a rolling, 12-month summation.

Applicable Compliance Method: Compliance with the daily and TPY OC emission limitations shall be determined by the record keeping requirements specified in Sections A.III.2 and A.III.3, respectively.

1.d Emission Limitation: 6.6 lbs of OC/gallon, for the cleanup material(s)

Applicable Compliance Method: Compliance with the OC content limitation shall be determined by the record keeping requirements specified in Section A.III.2. Formulation data or U.S. EPA Method 24 shall be used to determine the OC content of any cleanup material employed in this emissions unit.

1.e Emission Limitation: Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.f Emission Limitation: Visible PE of fugitive dust shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(3).

V. Testing Requirements (continued)

1.g Emission Limitations: 1.55 lbs of PE/hour and 6.78 TPY of PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations may be demonstrated using the following equations from the Draft Guide for the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [Cae/100] \times [1 - Coe/100]$, where:

E = PE emission rate, lbs/hr

M = usage rate of material sprayed, lbs/hr

S = solids content (%)

De = Deposition efficiency of material on surfaces*

Cae = PE capture efficiency of process ventilation system*

Coe = PE control efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: (238.1 lbs of gelcoat/hr x 53/100 gelcoat solids content x (1 - 99/100) x (80/100) x (1 - 0/100)) = 1.01 lbs of PE/hr vented to stacks

If required, the permittee shall demonstrate compliance with the hourly PE limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(10).

* The deposition efficiency figure and capture efficiency figure used in this equation are provided by the Composite Fabricators Association. The control efficiency figure is 0% based on uncontrolled process ventilation systems (i.e., no filtration/removal of PE).

(1.01 lbs of PE/hr x 8,760 hr/year)/2,000 lbs/ton = 4.42 TPY of PE

1.h Emission Limitations: 2.94 lbs of fugitive PE/hour and 12.88 TPY of fugitive PE

Applicable Compliance Method: The hourly and annual PE limitations are greater than the emissions unit's potentials to emit. Compliance with the hourly and annual PE emission limitations shall be demonstrated using the following equations from the Draft Guide to the Estimation and Permitting of Particulate Emissions from the Manufacture of Reinforced Plastic Composites prepared for the Composite Fabricators Association dated August 2001:

$E = [M] \times [S/100] \times [1 - De/100] \times [1 - Cae/100]$, where:

E = PE emission rate, lbs/hr

M = usage rate of material sprayed, lbs/hr

S = solids content (%)

De = Deposition efficiency of material on surfaces*

Cae = PE Capture efficiency of process ventilation system*

Example Using Worst Case Gelcoat Maximum Daily Usage Rate: [238.1 lbs of gelcoat/hr x (53/100) gelcoat solids content x (1 - 99/100) x (1 - 80/100)] = 0.25 lb of PE/hr as fugitive

* The deposition efficiency figure and capture efficiency figure used in this equation is provided by the Composite Fabricators Association.

(0.25 lb of PE/hr x 8,760 hrs/year)/2,000 lbs/ton = 1.10 TPY of PE as fugitive

V. Testing Requirements (continued)

- 1.i** Styrene Content Restrictions: 58%, by weight, for resins employed; 35%, by weight, for gelcoats employed

Applicable Compliance Method: Compliance with the styrene content restrictions shall be determined by the record keeping requirements specified in Section A.III.1.

- 1.j** Emission Limitations: the OC emission rate for resins employed shall not exceed 468.2 lbs of OC/ton of resin processed; the OC emission rate for gelcoats employed shall not exceed 336 lbs of OC/ton of resin processed.

Applicable Compliance Method: Compliance with the OC emission rate limitations for resins and gelcoats shall be determined by the record keeping requirements specified in Section A.III.1.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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Station 6 - fiberglass tank fabrication
using spray, filament winding, and
hand layup

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit was evaluated based on the actual materials employed (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxics Emissions" policy ("Air Toxics Policy") was applied for each toxic pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant:

Pollutant: Styrene

TLV (ug/m3): 85,235

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 3,151.68

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 8,523.5

Pollutant: MMA

TLV (ug/m3): 204,703

Maximum Hourly Emission Rate (lbs/hr): 0.19

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 378.2

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 20,470.3

Pollutant: Acetone

TLV (ug/m3): 1,187,117

Maximum Hourly Emission Rate (lbs/hr): 100

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline for emissions units P001-P006 (ug/m3): 113,268.7

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 118,711.7

Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxics Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxics Policy" will not be satisfied, the permittee shall not make the change. Changes that can affect the parameters used in the "Air Toxics Policy" include the following:

- a. changes in the composition of the materials used, or the use of new materials that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

If the permittee determines that the "Air Toxics Policy" will be satisfied with the above changes, Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy":

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxics Policy"; and
- c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxics Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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