



State of Ohio Environmental Protection Agency

Street Address:

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

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

03/30/01

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

02-04-00-0423
PICKEN'S PLASTICS, INC. - JEFFERSON PLANT 3
Casey T. Webster
Picken's Plastics, Inc. P.O. Box 127
149 S. Cucumber Street
Jefferson, OH 44047

Dear Casey T. Webster:

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

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

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

Very truly yours,

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

cc: USEPA
Jim Orlemann, DAPC Engineering
Michael Ahern, DAPC PMU
Northeast District Office
Pennsylvania
New York



Ohio EPA

State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 03/30/01

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance to:

PICKEN'S PLASTICS, INC. - JEFFERSON PLANT 3
149 S. Cucumber St.
P.O. Box 127
Jefferson, OH 44047

of a Title V permit for Facility ID: 02-04-00-0423

Emissions Unit ID (Company ID)/

Emissions Unit Activity Description:

R001 (Chop/Gelcoat Booth)

FRP Manufacturing

R002 (Gelcoat/Chop Booth)

FRP Manufacturing

R003 (Chop/Gelcoat Booth)

FRP Manufacturing

R004 (Gelcoat/Chop Booth)

FRP Manufacturing

R005 (Chop/Gelcoat Booth)

FRP Manufacturing

R006 (Gelcoat/Chop Booth)

FRP Manufacturing

R007 (Tooling Gelcoat Booth)

Polyester Gelcoating of FRP forming tools.

R008 (Paint Booth)

Painting of FRP parts.

R009 (Paint Booth)

Painting of FRP parts.

R010 (Paint Booth)

Painting of FRP parts.

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal

application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

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

annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

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

2. Scheduled Maintenance/Malfunction Reporting

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

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

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the

Act,
or modification, or for denial of a permit renewal application.

- b. necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing a request by the permittee for a permit modification, revocation and reissuance, or revocation, or condition of this permit.

- d.

- e. The the Director, upon receipt of a written request and within a reasonable time, any information that be requested to determine whether cause exists for modifying, reopening or revoking this permit furnish to the Director or an authorized representative of the Director, copies of records required be kept by this permit. For information claimed to be confidential in the submittal to the Director, furnish such records directly to the Administrator along with a claim of confidentiality.

7.

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11

8. Marketable Permit Programs

revision of this permit is required under any approved economic incentive, marketable permits, emissions permit.

9.

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

10. Reopening for Cause

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

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

11. Federal and State Enforceability

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

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

- ii. 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. Inspect at reasonable times any facilities, equipment (including monitoring and air control equipment), practices, or operations regulated or required under this permit.
As authorized by the Act, sample or monitor at reasonable times substances or parameters

- c. The air agency concerning any schedule of compliance for meeting an applicable requirement. applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the

- i. Dat compliance, and dates when such activities, milestones, or compliance were achieved.
- ii. explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

Compliance certifications concerning the terms and conditions contained in this permit that are enforceable emission limitations, standards, or work practices, shall be submitted to the appropriate following content:

- i. certifications shall be submitted annually on a calendar year basis. The annual permit term.
- ii.
 - (a) An certification.
 - (b)
 - (c) Whether compliance was continuous or intermittent.
The method(s) used for determining the compliance status of the source currently and over the required reporting period.
Such other facts as the Director of the Ohio EPA may require in the permit to
- iii. Compliance pursuant to sections 114(a)(3) and 504(b) of the Act.

13.

- a. Com established for alternate operating scenarios, emissions trading, and emissions averaging, but terms and conditions for which the permit shield is expressly prohibited under OAC

rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

14. Operational Flexibility

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

15. Emergencies

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

16. Off Permit Changes

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;
- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);

- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

17. Compliance Method Requirements

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

18. Insignificant Activity

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

B. State Only Enforceable Section

1. Permit to Install Requirement

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollut agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control such control system(s).

6.

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.

Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public

8. Additional Federally Enforceable Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which stat January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

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

P001 - Trim Booth 1-8
P002 - Trim Booth 9-16
P003 - Trim Booth 17-24
Z001 - Ambient Heat

Each insignificant emissions unit at this facility must comply with all State and federal regulations, as well as any emissions limitations and/or control requirements contained within a Permit to Install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Chop/Gelcoat Booth (R001)
Activity Description: FRP Manufacturing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R001).	OAC rule 3745-21-07(G)(2)	The hourly and daily limits specified in this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3) PTI 02-1349	Organic compound (OC) emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. See sections A.1.2.a., A.1.2.b. and A.1.2.c.
		OC emissions shall not exceed 7.3 tons/year, including all cleanup materials.

2. Additional Terms and Conditions

- 2.a** No cleanup material employed in this emissions unit shall be a photochemically reactive material, as defined in OAC Rule 3745-21-01(C)(5).
- 2.b** Cleanup material usage shall be limited to 396 gallons per year.
- 2.c** The emissions of organic material from the spray lay-up operation consist of styrene, a photochemically reactive material.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. The company identification for each lay-up material (i.e., polyester resin mix or gelcoat mix) and each cleanup material employed.
 - b. An identification of whether or not each cleanup material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
 - c. An identification of whether vapor suppressed or non-vapor suppressed polyester resin mix was employed.
 - d. An identification of the type of mechanical resin application (i.e., uncontrolled spray or controlled spray) employed.
 - e. The number of pounds of each lay-up material employed.
 - f. The styrene content of each lay-up material, in percent by weight.
 - g. The number of gallons of each cleanup material employed.
 - h. The OC content of each cleanup material, in pounds per gallon.
 - i. The total OC emission rate for all lay-up materials and cleanup materials employed, in pounds per day.
 - j. The actual number of hours the emissions unit was in operation.
 - k. The average hourly OC emission rate for all lay-up materials and cleanup materials employed, i.e., (i)/(j), in pounds per hour (average).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly OC emissions from the lay-up materials and cleanup materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions from the lay-up materials and cleanup materials exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which any photochemically reactive cleanup material was employed.
2. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and the total cleanup material usage for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the allowable emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 8 lbs OC/hr, including cleanup materials

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the record keeping requirements specified in section A.III.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests, performed in accordance with USEPA Method 18, 25 or 25A, as appropriate.

V. Testing Requirements (continued)

1.b Emission Limitation: 40 lbs OC/day, including cleanup materials

Applicable Compliance Method:

i. To calculate emissions from the lay-up operations, the permittee shall employ the following formula:

$$E(\text{lay-up}) = \text{summation of } (W_i \times EFi).$$

Where:

$E(\text{lay-up})$ = the daily organic compound emissions from all lay-up materials, in pounds per day.

i = subscript denoting a specific lay-up material employed.

W_i = the weight of lay-up material " i " employed, in tons per day (pounds per day divided by 2000 pounds per ton).

EF_i = the emission factor for styrene emissions, in pounds per ton, from lay-up material " i ", based on the styrene content and mechanical application type, as noted in Table 3, Unified Emission Factor (EUF) Table, of Technical Discussion of the Unified Emission Factors for Open Molding of Composites, April 7, 1999, or any later revisions.

ii. To calculate emissions from the cleanup materials, the permittee shall employ the following formula:

$$E(\text{cleanup}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{cleanup})$ = the daily organic compound emissions from all cleanup materials, in pounds per day.

i = subscript denoting a specific cleanup material employed.

V_i = the volume of cleanup material " i " employed, in gallons per day.

OC_i = the OC content of cleanup material " i ", in pounds per gallon.

iii. To calculate the total emissions from all materials, the permittee shall employ the following formula:

$$E(\text{total}) = E(\text{lay-up}) + E(\text{cleanup}).$$

1.c Emission Limitation: 7.3 TPY OC, including all cleanup materials

Applicable Compliance Method:

To determine annual OC emissions from all materials, compliance shall be based on the sum of the daily OC emission rates from lay-up materials and cleanup materials, $E(\text{total})$, as recorded in section A.III.1.i. of this permit, for the calendar year, divided by 2000 pounds/ton.

2. Formulation data or US EPA Method 24 shall be used to determine the OC contents of the coatings and the cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R001).		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install application for emission units R001 - R007 was evaluated based on the actual materials (typically lay-up 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. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each 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(s):

Pollutant: Styrene

TLV (ug/m3): 212,940

Maximum Hourly Emission Rate (lbs/hr): 4.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,360

MAGLC (ug/m3): 5,070

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

2. Physical changes to or changes 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 Toxic 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 Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic 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: Gelcoat/Chop Booth (R002)
Activity Description: FRP Manufacturing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R002).	OAC rule 3745-21-07(G)(2)	The hourly and daily limits specified in this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3) PTI 02-1349	Organic compound (OC) emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. See sections A.1.2.a., A.1.2.b. and A.1.2.c.
		OC emissions shall not exceed 7.3 tons/year, including all cleanup materials.

2. Additional Terms and Conditions

- 2.a** No cleanup material employed in this emissions unit shall be a photochemically reactive material, as defined in OAC Rule 3745-21-01(C)(5).
- 2.b** Cleanup material usage shall be limited to 396 gallons per year.
- 2.c** The emissions of organic material from the spray lay-up operation consist of styrene, a photochemically reactive material.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. The company identification for each lay-up material (i.e., polyester resin mix or gelcoat mix) and each cleanup material employed.
 - b. An identification of whether or not each cleanup material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
 - c. An identification of whether vapor suppressed or non-vapor suppressed polyester resin mix was employed.
 - d. An identification of the type of mechanical resin application (i.e., uncontrolled spray or controlled spray) employed.
 - e. The number of pounds of each lay-up material employed.
 - f. The styrene content of each lay-up material, in percent by weight.
 - g. The number of gallons of each cleanup material employed.
 - h. The OC content of each cleanup material, in pounds per gallon.
 - i. The total OC emission rate for all lay-up materials and cleanup materials employed, in pounds per day.
 - j. The actual number of hours the emissions unit was in operation.
 - k. The average hourly OC emission rate for all lay-up materials and cleanup materials employed, i.e., (i)/(j), in pounds per hour (average).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly OC emissions from the lay-up materials and cleanup materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions from the lay-up materials and cleanup materials exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which any photochemically reactive cleanup material was employed.
2. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and the total cleanup material usage for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the allowable emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 8 lbs OC/hr, including cleanup materials

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the record keeping requirements specified in section A.III.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests, performed in accordance with USEPA Method 18, 25 or 25A, as appropriate.

V. Testing Requirements (continued)

1.b Emission Limitation: 40 lbs OC/day, including cleanup materials

Applicable Compliance Method:

i. To calculate emissions from the lay-up operations, the permittee shall employ the following formula:

$$E(\text{lay-up}) = \text{summation of } (W_i \times E_{Fi}).$$

Where:

$E(\text{lay-up})$ = the daily organic compound emissions from all lay-up materials, in pounds per day.

i = subscript denoting a specific lay-up material employed.

W_i = the weight of lay-up material " i " employed, in tons per day (pounds per day divided by 2000 pounds per ton).

E_{Fi} = the emission factor for styrene emissions, in pounds per ton, from lay-up material " i ", based on the styrene content and mechanical application type, as noted in Table 3, Unified Emission Factor (EUF) Table, of Technical Discussion of the Unified Emission Factors for Open Molding of Composites, April 7, 1999, or any later revisions.

ii. To calculate emissions from the cleanup materials, the permittee shall employ the following formula:

$$E(\text{cleanup}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{cleanup})$ = the daily organic compound emissions from all cleanup materials, in pounds per day.

i = subscript denoting a specific cleanup material employed.

V_i = the volume of cleanup material " i " employed, in gallons per day.

OC_i = the OC content of cleanup material " i ", in pounds per gallon.

iii. To calculate the total emissions from all materials, the permittee shall employ the following formula:

$$E(\text{total}) = E(\text{lay-up}) + E(\text{cleanup}).$$

1.c Emission Limitation: 7.3 TPY OC, including all cleanup materials

Applicable Compliance Method:

To determine annual OC emissions from all materials, compliance shall be based on the sum of the daily OC emission rates from lay-up materials and cleanup materials, $E(\text{total})$, as recorded in section A.III.1.i. of this permit, for the calendar year, divided by 2000 pounds/ton.

2. Formulation data or US EPA Method 24 shall be used to determine the OC contents of the coatings and the cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R002).		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install application for emission units R001 - R007 was evaluated based on the actual materials (typically lay-up 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. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each 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(s):

Pollutant: Styrene

TLV (ug/m3): 212,940

Maximum Hourly Emission Rate (lbs/hr): 4.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,360

MAGLC (ug/m3): 5,070

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

2. Physical changes to or changes 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 Toxic 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 Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic 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: Chop/Gelcoat Booth (R003)
Activity Description: FRP Manufacturing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R003).	OAC rule 3745-21-07(G)(2)	The hourly and daily limits specified in this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3) PTI 02-1349	Organic compound (OC) emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. See sections A.1.2.a., A.1.2.b. and A.1.2.c.
		OC emissions shall not exceed 7.3 tons/year, including all cleanup materials.

2. Additional Terms and Conditions

- 2.a No cleanup material employed in this emissions unit shall be a photochemically reactive material, as defined in OAC Rule 3745-21-01(C)(5).
- 2.b Cleanup material usage shall be limited to 396 gallons per year.
- 2.c The emissions of organic material from the spray lay-up operation consist of styrene, a photochemically reactive material.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. The company identification for each lay-up material (i.e., polyester resin mix or gelcoat mix) and each cleanup material employed.
 - b. An identification of whether or not each cleanup material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
 - c. An identification of whether vapor suppressed or non-vapor suppressed polyester resin mix was employed.
 - d. An identification of the type of mechanical resin application (i.e., uncontrolled spray or controlled spray) employed.
 - e. The number of pounds of each lay-up material employed.
 - f. The styrene content of each lay-up material, in percent by weight.
 - g. The number of gallons of each cleanup material employed.
 - h. The OC content of each cleanup material, in pounds per gallon.
 - i. The total OC emission rate for all lay-up materials and cleanup materials employed, in pounds per day.
 - j. The actual number of hours the emissions unit was in operation.
 - k. The average hourly OC emission rate for all lay-up materials and cleanup materials employed, i.e., (i)/(j), in pounds per hour (average).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly OC emissions from the lay-up materials and cleanup materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions from the lay-up materials and cleanup materials exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which any photochemically reactive cleanup material was employed.
2. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and the total cleanup material usage for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the allowable emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 8 lbs OC/hr, including cleanup materials

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the record keeping requirements specified in section A.III.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests, performed in accordance with USEPA Method 18, 25 or 25A, as appropriate.

V. Testing Requirements (continued)

1.b Emission Limitation: 40 lbs OC/day, including cleanup materials

Applicable Compliance Method:

i. To calculate emissions from the lay-up operations, the permittee shall employ the following formula:

$$E(\text{lay-up}) = \text{summation of } (W_i \times EFi).$$

Where:

$E(\text{lay-up})$ = the daily organic compound emissions from all lay-up materials, in pounds per day.

i = subscript denoting a specific lay-up material employed.

W_i = the weight of lay-up material " i " employed, in tons per day (pounds per day divided by 2000 pounds per ton).

EF_i = the emission factor for styrene emissions, in pounds per ton, from lay-up material " i ", based on the styrene content and mechanical application type, as noted in Table 3, Unified Emission Factor (EUF) Table, of Technical Discussion of the Unified Emission Factors for Open Molding of Composites, April 7, 1999, or any later revisions.

ii. To calculate emissions from the cleanup materials, the permittee shall employ the following formula:

$$E(\text{cleanup}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{cleanup})$ = the daily organic compound emissions from all cleanup materials, in pounds per day.

i = subscript denoting a specific cleanup material employed.

V_i = the volume of cleanup material " i " employed, in gallons per day.

OC_i = the OC content of cleanup material " i ", in pounds per gallon.

iii. To calculate the total emissions from all materials, the permittee shall employ the following formula:

$$E(\text{total}) = E(\text{lay-up}) + E(\text{cleanup}).$$

1.c Emission Limitation: 7.3 TPY OC, including all cleanup materials

Applicable Compliance Method:

To determine annual OC emissions from all materials, compliance shall be based on the sum of the daily OC emission rates from lay-up materials and cleanup materials, $E(\text{total})$, as recorded in section A.III.1.i. of this permit, for the calendar year, divided by 2000 pounds/ton.

2. Formulation data or US EPA Method 24 shall be used to determine the OC contents of the coatings and the cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R003).		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install application for emission units R001 - R007 was evaluated based on the actual materials (typically lay-up 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. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each 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(s):

Pollutant: Styrene

TLV (ug/m3): 212,940

Maximum Hourly Emission Rate (lbs/hr): 4.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,360

MAGLC (ug/m3): 5,070

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

2. Physical changes to or changes 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 Toxic 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 Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic 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: Gelcoat/Chop Booth (R004)
Activity Description: FRP Manufacturing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R004).	OAC rule 3745-21-07(G)(2) OAC rule 3745-31-05(A)(3) PTI 02-1349	The hourly and daily limits specified in this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3). Organic compound (OC) emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. See sections A.1.2.a., A.1.2.b. and A.1.2.c. OC emissions shall not exceed 7.3 tons/year, including all cleanup materials.

2. Additional Terms and Conditions

- 2.a** No cleanup material employed in this emissions unit shall be a photochemically reactive material, as defined in OAC Rule 3745-21-01(C)(5).
- 2.b** Cleanup material usage shall be limited to 396 gallons per year.
- 2.c** The emissions of organic material from the spray lay-up operation consist of styrene, a photochemically reactive material.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. The company identification for each lay-up material (i.e., polyester resin mix or gelcoat mix) and each cleanup material employed.
 - b. An identification of whether or not each cleanup material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
 - c. An identification of whether vapor suppressed or non-vapor suppressed polyester resin mix was employed.
 - d. An identification of the type of mechanical resin application (i.e., uncontrolled spray or controlled spray) employed.
 - e. The number of pounds of each lay-up material employed.
 - f. The styrene content of each lay-up material, in percent by weight.
 - g. The number of gallons of each cleanup material employed.
 - h. The OC content of each cleanup material, in pounds per gallon.
 - i. The total OC emission rate for all lay-up materials and cleanup materials employed, in pounds per day.
 - j. The actual number of hours the emissions unit was in operation.
 - k. The average hourly OC emission rate for all lay-up materials and cleanup materials employed, i.e., (i)/(j), in pounds per hour (average).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly OC emissions from the lay-up materials and cleanup materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions from the lay-up materials and cleanup materials exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which any photochemically reactive cleanup material was employed.
2. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and the total cleanup material usage for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the allowable emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 8 lbs OC/hr, including cleanup materials

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the record keeping requirements specified in section A.III.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests, performed in accordance with USEPA Method 18, 25 or 25A, as appropriate.

V. Testing Requirements (continued)

1.b Emission Limitation: 40 lbs OC/day, including cleanup materials

Applicable Compliance Method:

i. To calculate emissions from the lay-up operations, the permittee shall employ the following formula:

$$E(\text{lay-up}) = \text{summation of } (W_i \times EFi).$$

Where:

$E(\text{lay-up})$ = the daily organic compound emissions from all lay-up materials, in pounds per day.

i = subscript denoting a specific lay-up material employed.

W_i = the weight of lay-up material " i " employed, in tons per day (pounds per day divided by 2000 pounds per ton).

EF_i = the emission factor for styrene emissions, in pounds per ton, from lay-up material " i ", based on the styrene content and mechanical application type, as noted in Table 3, Unified Emission Factor (EUF) Table, of Technical Discussion of the Unified Emission Factors for Open Molding of Composites, April 7, 1999, or any later revisions.

ii. To calculate emissions from the cleanup materials, the permittee shall employ the following formula:

$$E(\text{cleanup}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{cleanup})$ = the daily organic compound emissions from all cleanup materials, in pounds per day.

i = subscript denoting a specific cleanup material employed.

V_i = the volume of cleanup material " i " employed, in gallons per day.

OC_i = the OC content of cleanup material " i ", in pounds per gallon.

iii. To calculate the total emissions from all materials, the permittee shall employ the following formula:

$$E(\text{total}) = E(\text{lay-up}) + E(\text{cleanup}).$$

1.c Emission Limitation: 7.3 TPY OC, including all cleanup materials

Applicable Compliance Method:

To determine annual OC emissions from all materials, compliance shall be based on the sum of the daily OC emission rates from lay-up materials and cleanup materials, $E(\text{total})$, as recorded in section A.III.1.i. of this permit, for the calendar year, divided by 2000 pounds/ton.

2. Formulation data or US EPA Method 24 shall be used to determine the OC contents of the coatings and the cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R004).		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install application for emission units R001 - R007 was evaluated based on the actual materials (typically lay-up 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. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each 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(s):

Pollutant: Styrene

TLV (ug/m3): 212,940

Maximum Hourly Emission Rate (lbs/hr): 4.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,360

MAGLC (ug/m3): 5,070

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

2. Physical changes to or changes 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 Toxic 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 Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic 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: Chop/Gelcoat Booth (R005)
Activity Description: FRP Manufacturing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R005).	OAC rule 3745-21-07(G)(2) OAC rule 3745-31-05(A)(3) PTI 02-1349	The hourly and daily limits specified in this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3). Organic compound (OC) emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. See sections A.1.2.a., A.1.2.b. and A.1.2.c. OC emissions shall not exceed 7.3 tons/year, including all cleanup materials.

2. Additional Terms and Conditions

- 2.a No cleanup material employed in this emissions unit shall be a photochemically reactive material, as defined in OAC Rule 3745-21-01(C)(5).
- 2.b Cleanup material usage shall be limited to 396 gallons per year.
- 2.c The emissions of organic material from the spray lay-up operation consist of styrene, a photochemically reactive material.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. The company identification for each lay-up material (i.e., polyester resin mix or gelcoat mix) and each cleanup material employed.
 - b. An identification of whether or not each cleanup material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
 - c. An identification of whether vapor suppressed or non-vapor suppressed polyester resin mix was employed.
 - d. An identification of the type of mechanical resin application (i.e., uncontrolled spray or controlled spray) employed.
 - e. The number of pounds of each lay-up material employed.
 - f. The styrene content of each lay-up material, in percent by weight.
 - g. The number of gallons of each cleanup material employed.
 - h. The OC content of each cleanup material, in pounds per gallon.
 - i. The total OC emission rate for all lay-up materials and cleanup materials employed, in pounds per day.
 - j. The actual number of hours the emissions unit was in operation.
 - k. The average hourly OC emission rate for all lay-up materials and cleanup materials employed, i.e., (i)/(j), in pounds per hour (average).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly OC emissions from the lay-up materials and cleanup materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions from the lay-up materials and cleanup materials exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which any photochemically reactive cleanup material was employed.
2. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and the total cleanup material usage for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the allowable emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 8 lbs OC/hr, including cleanup materials

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the record keeping requirements specified in section A.III.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests, performed in accordance with USEPA Method 18, 25 or 25A, as appropriate.

V. Testing Requirements (continued)

1.b Emission Limitation: 40 lbs OC/day, including cleanup materials

Applicable Compliance Method:

i. To calculate emissions from the lay-up operations, the permittee shall employ the following formula:

$$E(\text{lay-up}) = \text{summation of } (W_i \times EFi).$$

Where:

$E(\text{lay-up})$ = the daily organic compound emissions from all lay-up materials, in pounds per day.

i = subscript denoting a specific lay-up material employed.

W_i = the weight of lay-up material " i " employed, in tons per day (pounds per day divided by 2000 pounds per ton).

EF_i = the emission factor for styrene emissions, in pounds per ton, from lay-up material " i ", based on the styrene content and mechanical application type, as noted in Table 3, Unified Emission Factor (EUF) Table, of Technical Discussion of the Unified Emission Factors for Open Molding of Composites, April 7, 1999, or any later revisions.

ii. To calculate emissions from the cleanup materials, the permittee shall employ the following formula:

$$E(\text{cleanup}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{cleanup})$ = the daily organic compound emissions from all cleanup materials, in pounds per day.

i = subscript denoting a specific cleanup material employed.

V_i = the volume of cleanup material " i " employed, in gallons per day.

OC_i = the OC content of cleanup material " i ", in pounds per gallon.

iii. To calculate the total emissions from all materials, the permittee shall employ the following formula:

$$E(\text{total}) = E(\text{lay-up}) + E(\text{cleanup}).$$

1.c Emission Limitation: 7.3 TPY OC, including all cleanup materials

Applicable Compliance Method:

To determine annual OC emissions from all materials, compliance shall be based on the sum of the daily OC emission rates from lay-up materials and cleanup materials, $E(\text{total})$, as recorded in section A.III.1.i. of this permit, for the calendar year, divided by 2000 pounds/ton.

2. Formulation data or US EPA Method 24 shall be used to determine the OC contents of the coatings and the cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R005).		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install application for emission units R001 - R007 was evaluated based on the actual materials (typically lay-up 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. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each 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(s):

Pollutant: Styrene

TLV (ug/m3): 212,940

Maximum Hourly Emission Rate (lbs/hr): 4.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,360

MAGLC (ug/m3): 5,070

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

2. Physical changes to or changes 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 Toxic 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 Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic 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: Gelcoat/Chop Booth (R006)
Activity Description: FRP Manufacturing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R006).	OAC rule 3745-21-07(G)(2) OAC rule 3745-31-05(A)(3) PTI 02-1349	The hourly and daily limits specified in this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3). Organic compound (OC) emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. See sections A.1.2.a., A.1.2.b. and A.1.2.c. OC emissions shall not exceed 7.3 tons/year, including all cleanup materials.

2. Additional Terms and Conditions

- 2.a No cleanup material employed in this emissions unit shall be a photochemically reactive material, as defined in OAC Rule 3745-21-01(C)(5).
- 2.b Cleanup material usage shall be limited to 396 gallons per year.
- 2.c The emissions of organic material from the spray lay-up operation consist of styrene, a photochemically reactive material.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. The company identification for each lay-up material (i.e., polyester resin mix or gelcoat mix) and each cleanup material employed.
 - b. An identification of whether or not each cleanup material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
 - c. An identification of whether vapor suppressed or non-vapor suppressed polyester resin mix was employed.
 - d. An identification of the type of mechanical resin application (i.e., uncontrolled spray or controlled spray) employed.
 - e. The number of pounds of each lay-up material employed.
 - f. The styrene content of each lay-up material, in percent by weight.
 - g. The number of gallons of each cleanup material employed.
 - h. The OC content of each cleanup material, in pounds per gallon.
 - i. The total OC emission rate for all lay-up materials and cleanup materials employed, in pounds per day.
 - j. The actual number of hours the emissions unit was in operation.
 - k. The average hourly OC emission rate for all lay-up materials and cleanup materials employed, i.e., (i)/(j), in pounds per hour (average).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly OC emissions from the lay-up materials and cleanup materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions from the lay-up materials and cleanup materials exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which any photochemically reactive cleanup material was employed.
2. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and the total cleanup material usage for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the allowable emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 8 lbs OC/hr, including cleanup materials

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the record keeping requirements specified in section A.III.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests, performed in accordance with USEPA Method 18, 25 or 25A, as appropriate.

V. Testing Requirements (continued)

1.b Emission Limitation: 40 lbs OC/day, including cleanup materials

Applicable Compliance Method:

i. To calculate emissions from the lay-up operations, the permittee shall employ the following formula:

$$E(\text{lay-up}) = \text{summation of } (W_i \times EFi).$$

Where:

$E(\text{lay-up})$ = the daily organic compound emissions from all lay-up materials, in pounds per day.

i = subscript denoting a specific lay-up material employed.

W_i = the weight of lay-up material " i " employed, in tons per day (pounds per day divided by 2000 pounds per ton).

EF_i = the emission factor for styrene emissions, in pounds per ton, from lay-up material " i ", based on the styrene content and mechanical application type, as noted in Table 3, Unified Emission Factor (EUF) Table, of Technical Discussion of the Unified Emission Factors for Open Molding of Composites, April 7, 1999, or any later revisions.

ii. To calculate emissions from the cleanup materials, the permittee shall employ the following formula:

$$E(\text{cleanup}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{cleanup})$ = the daily organic compound emissions from all cleanup materials, in pounds per day.

i = subscript denoting a specific cleanup material employed.

V_i = the volume of cleanup material " i " employed, in gallons per day.

OC_i = the OC content of cleanup material " i ", in pounds per gallon.

iii. To calculate the total emissions from all materials, the permittee shall employ the following formula:

$$E(\text{total}) = E(\text{lay-up}) + E(\text{cleanup}).$$

1.c Emission Limitation: 7.3 TPY OC, including all cleanup materials

Applicable Compliance Method:

To determine annual OC emissions from all materials, compliance shall be based on the sum of the daily OC emission rates from lay-up materials and cleanup materials, $E(\text{total})$, as recorded in section A.III.1.i. of this permit, for the calendar year, divided by 2000 pounds/ton.

2. Formulation data or US EPA Method 24 shall be used to determine the OC contents of the coatings and the cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Spray lay-up molding of polyester resin mixes and gelcoat mixes to make fiberglass reinforced plastic parts (R006).		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install application for emission units R001 - R007 was evaluated based on the actual materials (typically lay-up 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. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each 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(s):

Pollutant: Styrene

TLV (ug/m3): 212,940

Maximum Hourly Emission Rate (lbs/hr): 4.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,360

MAGLC (ug/m3): 5,070

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

2. Physical changes to or changes 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 Toxic 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 Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic 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: Tooling Gelcoat Booth (R007)
Activity Description: Polyester Gelcoating of FRP forming tools.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Tooling gelcoat booth for applying gelcoat to molds (R007).	OAC rule 3745-21-07(G)(2)	The hourly and daily limits specified in this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3) PTI 02-1349	Organic compound (OC) emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. See sections A.1.2.a., A.1.2.b., and A.1.2.c. OC emissions shall not exceed 7.3 tons/year, including all cleanup materials.

2. Additional Terms and Conditions

- 2.a No cleanup material employed in this emissions unit shall be a photochemically reactive material, as defined in OAC Rule 3745-21-01(C)(5).
- 2.b Cleanup material usage shall be limited to 396 gallons per year.
- 2.c The emissions of organic material from the spray lay-up operation consist of styrene, a photochemically reactive material.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. The company identification for each lay-up material (i.e., gelcoat mix) and each cleanup material employed.
 - b. An identification of whether or not each cleanup material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
 - c. An identification of the type of mechanical gelcoat application (i.e., uncontrolled spray or controlled spray) employed.
 - d. The number of pounds of each lay-up material employed.
 - e. The styrene content of each lay-up material, in percent by weight.
 - f. The number of gallons of each cleanup material employed.
 - g. The OC content of each cleanup material, in pounds per gallon.
 - h. The total OC emission rate for all lay-up materials and cleanup materials employed, in pounds per day.
 - i. The actual number of hours the emissions unit was in operation.
 - j. The average hourly OC emission rate for all lay-up materials and cleanup materials employed, i.e., (i)/(j), in pounds per hour (average).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly OC emissions from the lay-up materials and cleanup materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions from the lay-up materials and cleanup materials exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which any photochemically reactive cleanup material was employed.
2. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and the total cleanup material usage for the previous calendar year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the allowable emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 8 lbs OC/hr, including cleanup materials

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the record keeping requirements specified in section A.III.1. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests, performed in accordance with USEPA Method 18, 25 or 25A, as appropriate.

V. Testing Requirements (continued)

1.b Emission Limitation: 40 lbs OC/day, including cleanup materials

Applicable Compliance Method:

i. To calculate emissions from the lay-up operations, the permittee shall employ the following formula:

$$E(\text{lay-up}) = \text{summation of } (W_i \times E_{Fi}).$$

Where:

$E(\text{lay-up})$ = the daily organic compound emissions from all lay-up materials, in pounds per day.

i = subscript denoting a specific lay-up material employed.

W_i = the weight of lay-up material " i " employed, in tons per day (pounds per day divided by 2000 pounds per ton).

E_{Fi} = the emission factor for styrene emissions, in pounds per ton, from lay-up material " i ", based on the styrene content and mechanical application type, as noted in Table 3, Unified Emission Factor (EUF) Table, of Technical Discussion of the Unified Emission Factors for Open Molding of Composites, April 7, 1999, or any later revisions.

ii. To calculate emissions from the cleanup materials, the permittee shall employ the following formula:

$$E(\text{cleanup}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{cleanup})$ = the daily organic compound emissions from all cleanup materials, in pounds per day.

i = subscript denoting a specific cleanup material employed.

V_i = the volume of cleanup material " i " employed, in gallons per day.

OC_i = the OC content of cleanup material " i ", in pounds per gallon.

iii. To calculate the total emissions from all materials, the permittee shall employ the following formula:

$$E(\text{total}) = E(\text{lay-up}) + E(\text{cleanup}).$$

1.c Emission Limitation: 7.3 TPY OC, including all cleanup materials

Applicable Compliance Method:

To determine annual OC emissions from all materials, compliance shall be based on the sum of the daily OC emission rates from lay-up materials and clean-up materials, $E(\text{total})$, as recorded in section A.III.1.h. of this permit, for the calendar year, divided by 2000 pounds/ton.

2. Formulation data or US EPA Method 24 shall be used to determine the OC contents of the coatings and the cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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Tooling gelcoat booth for applying gelcoat to molds (R007).

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install application for emission units R001 - R007 was evaluated based on the actual materials (typically lay-up 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. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each 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(s):

Pollutant: Styrene

TLV (ug/m3): 212,940

Maximum Hourly Emission Rate (lbs/hr): 4.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3,360

MAGLC (ug/m3): 5,070

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

2. Physical changes to or changes 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 Toxic 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 Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic 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: Paint Booth (R008)
Activity Description: Painting of FRP parts.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Paint spray booth # 8 for fiberglass reinforced plastic parts (R008).	OAC rule 3745-17-07(A)	The visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average.
	OAC rule 3745-17-11	The particulate emissions from this emissions unit shall not exceed 0.551 pound per hour.
	OAC rule 3745-21-07(G)(2)	The hourly and daily limits specified in this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-31-05(A)(3) PTI 02-1349	Organic compound (OC) emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. OC emissions shall not exceed 7.3 tons/year, including all cleanup materials. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11.

2. Additional Terms and Conditions

- 2.a No cleanup material employed in this emissions unit shall be a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
- 2.b Cleanup material usage shall be limited to 396 gallons per year.

II. Operational Restrictions

1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. The name and company identification number for each coating and cleanup material employed.
 - b. An identification of whether or not each cleanup material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
 - c. The number of gallons of each coating and cleanup material employed.
 - d. The OC content of each coating and cleanup material employed, in pounds per gallon.
 - e. The volume of each cleanup material dispensed, in gallons per day.
 - f. The volume of each cleanup material returned, in gallons per day.
 - g. The volume of evaporated cleanup material, which is estimated by subtracting the volume of returned cleanup material from the volume of dispensed cleanup material, in gallons per day.
 - h. The total OC emission rate for all coatings and cleanup materials employed, in pounds per day.
 - i. The total number of hours the emissions unit was in operation.
 - j. The average hourly OC emission rate for all coatings and cleanup materials employed, i.e., (h)/(i), in pounds per hour.
2. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly OC emissions from the coatings and cleanup materials exceeded 8.0 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions from the coatings and cleanup materials exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which any photochemically reactive cleanup material was employed.
2. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and the total cleanup material usage for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall notify the Northeast District Office in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Northeast District Office within 30 days after the event occurs.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emissions Limitation:
0.551 pound PE per hour

Applicable Compliance Method:

To determine the actual worst case emission rate for PE, the following equation may be used:

$$E = CTG \times SC \times (1-TE) \times (1-CE).$$

Where the following applies:

E = PE rate, lbs/hr

CTG = maximum coating usage rate, gal/hr

SC = maximum solids content, lbs/gal

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, compliance shall be demonstrated by performing emission tests in accordance with USEPA Methods 1-5.

1.b Emissions Limitation:
20% opacity as a six-minute average

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1), using the procedures specified in USEPA Reference Method 9.

1.c Emissions Limitation:
8 pounds OC per hour, including cleanup materials

Applicable Compliance Method:

Compliance shall be determined in accordance with record keeping requirements specified in section A.III.1 of these terms and conditions. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests, performed in accordance with USEPA Method 18, 25 or 25A, as appropriate.

V. Testing Requirements (continued)

- 1.d** Emission Limitation:
40 pounds OC per day, including cleanup materials

Applicable Compliance Method:

i. To calculate emissions from the coatings, the permittee shall employ the following formula:

$$E(\text{coating}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{coating})$ = the organic compound emissions from all coatings, in pounds per day.

i = subscript denoting a specific coating employed.

V_i = the volume of coating "i" employed, in gallons per day.

OC_i = the OC content of coating "i", in pounds per gallon.

ii. To calculate emissions from the cleanup materials, the permittee shall employ the following formula:

$$E(\text{cleanup}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{cleanup})$ = the daily OC emissions from all cleanup materials, in pounds per day.

i = subscript denoting a specific cleanup material employed.

V_i = the volume of evaporated cleanup material "i" employed, as specified in section A.III.1.g., in gallons per day.

OC_i = the OC content of clean-up material "i", in pounds per gallon.

iii. To calculate emissions from coatings and cleanup materials, the permittee shall employ the following formula:

$$E(\text{total}) = E(\text{coating}) + E(\text{cleanup}).$$

- 1.e** Emissions Limitation:
7.3 tons OC per year, including clean-up materials.

Applicable Compliance Method:

To determine annual OC emissions from all materials, compliance shall be based on the sum of the daily OC emission rates from coating materials and cleanup materials, $E(\text{total})$, as recorded in section A.III.1.h. of this permit, for the calendar year, divided by 2000 pounds/ton.

- 2.** Formulation data or US EPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Paint spray booth # 8 for fiberglass reinforced plastic parts (R008).		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install application for this emissions unit R008 was evaluated based on the actual materials (typically coating 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. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each 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(s):

Pollutant: Cyclohexanone

TLV (ug/m3): 100,000

Maximum Hourly Emission Rate (lbs/hr): 6.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 768.2

MAGLC (ug/m3): 2,381

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

2. Physical changes to or changes 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 Toxic 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 Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic 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: Paint Booth (R009)
Activity Description: Painting of FRP parts.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Paint spray booth #9 with 1.5 mmBtu/hr gas-fired drying oven for fiberglass reinforced plastic parts (R009).	OAC rule 3745-17-07(A)	The visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average.
	OAC rule 3745-17-11	The particulate emissions from this emissions unit shall not exceed 0.551 pound per hour.
	OAC rule 3745-21-07(G)(2)	The hourly and daily limits specified in this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-31-05(A)(3) PTI 02-1349	Organic compound (OC) emissions shall not exceed 8 lbs/hr and 40 lbs/day, including cleanup materials. OC emissions shall not exceed 7.3 tons/year, including all cleanup materials. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11.

2. Additional Terms and Conditions

- 2.a** No cleanup material employed in this emissions unit shall be a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
- 2.b** Cleanup material usage shall be limited to 396 gallons per year.

II. Operational Restrictions

1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. The name and company identification number for each coating and cleanup material employed.
 - b. An identification of whether or not each cleanup material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
 - c. The number of gallons of each coating and cleanup material employed.
 - d. The OC content of each coating and cleanup material employed, in pounds per gallon.
 - e. The volume of each cleanup material dispensed, in gallons per day.
 - f. The volume of each cleanup material returned, in gallons per day.
 - g. The volume of evaporated cleanup material, which is estimated by subtracting the volume of returned cleanup material from the volume of dispensed cleanup material, in gallons per day.
 - h. The total OC emission rate for all coatings and cleanup materials employed, in pounds per day.
 - i. The total number of hours the emissions unit was in operation.
 - j. The average hourly OC emission rate for all coatings and cleanup materials employed, i.e., (h)/(i), in pounds per hour.
2. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly OC emissions from the coatings and cleanup materials exceeded 8.0 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which the OC emissions from the coatings and cleanup materials exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - c. An identification of each day during which any photochemically reactive cleanup material was employed.
2. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and the total cleanup material usage for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall notify the Northeast District Office in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Northeast District Office within 30 days after the event occurs.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emissions Limitation:
0.551 pound PE per hour

Applicable Compliance Method:

To determine the actual worst case emission rate for PE, the following equation may be used:

$$E = CTG \times SC \times (1-TE) \times (1-CE).$$

Where the following applies:

E = PE rate, lbs/hr

CTG = maximum coating usage rate, gal/hr

SC = maximum solids content, lbs/gal

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, compliance shall be demonstrated by performing emission tests in accordance with USEPA Methods 1-5.

1.b Emissions Limitation:
20% opacity as a six-minute average

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1), using the procedures specified in USEPA Reference Method 9.

1.c Emissions Limitation:
8 pounds OC per hour, including cleanup materials

Applicable Compliance Method:

Compliance shall be determined in accordance with record keeping requirements specified in section A.III.1 of these terms and conditions. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests, performed in accordance with USEPA Method 18, 25 or 25A, as appropriate.

V. Testing Requirements (continued)

- 1.d** Emission Limitation:
40 pounds OC per day, including cleanup materials

Applicable Compliance Method:

i. To calculate emissions from the coatings, the permittee shall employ the following formula:

$$E(\text{coating}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{coating})$ = the organic compound emissions from all coatings, in pounds per day.

i = subscript denoting a specific coating employed.

V_i = the volume of coating "i" employed, in gallons per day.

OC_i = the OC content of coating "i", in pounds per gallon.

ii. To calculate emissions from the cleanup materials, the permittee shall employ the following formula:

$$E(\text{cleanup}) = \text{summation of } (V_i \times OC_i).$$

Where:

$E(\text{cleanup})$ = the daily OC emissions from all cleanup materials, in pounds per day.

i = subscript denoting a specific cleanup material employed.

V_i = the volume of evaporated cleanup material "i" employed, as specified in section A.III.1.g., in gallons per day.

OC_i = the OC content of clean-up material "i", in pounds per gallon.

iii. To calculate emissions from coatings and cleanup materials, the permittee shall employ the following formula:

$$E(\text{total}) = E(\text{coating}) + E(\text{cleanup}).$$

- 1.e** Emissions Limitation:
7.3 tons OC per year, including clean-up materials.

Applicable Compliance Method:

To determine annual OC emissions from all materials, compliance shall be based on the sum of the daily OC emission rates from coating materials and cleanup materials, $E(\text{total})$, as recorded in section A.III.1.h. of this permit, for the calendar year, divided by 2000 pounds/ton.

- 2.** Formulation data or US EPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Paint spray booth #9 with 1.5 mmBtu/hr gas-fired drying oven for fiberglass reinforced plastic parts (R009).		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- The permit to install application for this emissions unit R009 was evaluated based on the actual materials (typically coating 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. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each 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(s):

Pollutant: Cyclohexanone

TLV (ug/m3): 100,000

Maximum Hourly Emission Rate (lbs/hr): 6.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 768.2

MAGLC (ug/m3): 2,381

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

2. Physical changes to or changes 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 Toxic 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 Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic 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: Paint Booth (R010)
Activity Description: Painting of FRP parts.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Paint spray booth #10 with 1.5 mmBtu/hr gas-fired drying oven for fiberglass reinforced plastic parts (R010).	OAC rule 3745-17-07(A)	The visible emission limits specified in this applicable rule are less stringent than the limit established pursuant to OAC rule 3745-31-05.
	OAC rule 3745-17-11	The particulate emissions from this emissions unit shall not exceed 0.551 pound per hour.
	OAC rule 3745-21-07(G)(2)	Exempt, see section A.I.2.a of these terms and conditions.
	OAC rule 3745-31-05(A)(3) PTI 02-13386	The visible particulate emissions from any stack shall not exceed 0% opacity as a six-minute average. Organic compound (OC) emissions shall not exceed 6 lbs/hr and 26.28 tons/year, including cleanup material. See section A.I.2.a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-11.

2. Additional Terms and Conditions

- 2.a This emissions unit shall not employ organic liquids which are photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

II. Operational Restrictions

1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. The name and company identification number for each coating and cleanup material.
 - b. An identification of whether or not each coating and each cleanup material employed is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
 - c. The number of gallons of each coating and cleanup material employed.
 - d. The OC content of each coating and cleanup material employed, in pounds per gallon.
 - e. The volume of each cleanup material dispensed, in gallons per day.
 - f. The volume of each cleanup material returned, in gallons per day.
 - g. The volume of evaporated cleanup material, which is estimated by subtracting the volume of returned cleanup material from the volume of dispensed cleanup material, in gallons per day.
 - h. The total OC emission rate for all coatings and cleanup materials employed, in pounds per day.
 - i. The total number of hours the emissions unit was in operation.
 - j. The average hourly OC emission rate for all coatings and cleanup materials employed, i.e., (h)/(i), in pounds per hour.
2. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. An identification of each day during which the average hourly OC emissions from the coatings and cleanup materials exceeded 6.0 pounds per hour, and the actual average hourly OC emissions for each such day.
 - b. An identification of each day during which any photochemically reactive material was employed.
2. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit and the total cleanup material usage for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall notify the Northeast District Office in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Northeast District Office within 30 days after the event occurs.

V. Testing Requirements

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

V. Testing Requirements (continued)

- 1.a** Emissions Limitation:
0.551 pound PE per hour

Applicable Compliance Method:

To determine the actual worst case emission rate for PE, the following equation may be used:

$$E = CTG \times SC \times (1-TE) \times (1-CE).$$

Where the following applies:

E = PE rate, lbs/hr

CTG = maximum coating usage rate, gal/hr

SC = maximum solids content, lbs/gal

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, compliance shall be demonstrated by performing emission tests in accordance with USEPA Methods 1-5.

- 1.b** Emissions Limitation:
0% opacity as a six-minute average

Applicable Compliance Method:

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1), using the procedures specified in USEPA Reference Method 9.

- 1.c** Emissions Limitation:
6 pounds OC per hour, including cleanup materials

Applicable Compliance Method:

Compliance shall be determined in accordance with record keeping requirements specified in section A.III.1 of these terms and conditions. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests, performed in accordance with USEPA Method 18, 25 or 25A, as appropriate.

- 1.d** Emissions Limitation:
26.28 tons OC per year, including cleanup materials

Applicable Compliance Method:

To determine annual OC emissions from all materials, compliance shall be based on the sum of the daily OC emission rates from coating materials and cleanup materials as recorded in section A.III.1.h. of this permit, for the calendar year, divided by 2000 pounds/ton.

- 2.** Formulation data or US EPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Paint spray booth #10 with 1.5 mmBtu/hr gas-fired drying oven for fiberglass reinforced plastic parts (R010).		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install application for this emissions unit R010 was evaluated based on the actual materials (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. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each 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(s):

Pollutant: Cyclohexanone

TLV (ug/m3): 100,000

Maximum Hourly Emission Rate (lbs/hr): 6.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 977.5

MAGLC (ug/m3): 2,381

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

2. Physical changes to or changes 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 Toxic 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 Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), 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.).
3. If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the 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.
4. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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