



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
LUCAS COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 04-01237

DATE: 11/29/2001

Creative Products Inc
Jeff Smith
1420 Kiewetter St
Holland, OH 43528

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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

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

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

Very truly yours,

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

cc: USEPA

TDES



**Permit To Install
Terms and Conditions**

**Issue Date: 11/29/2001
Effective Date: 11/29/2001**

FINAL PERMIT TO INSTALL 04-01237

Application Number: 04-01237
APS Premise Number: 0448002090
Permit Fee: **\$1600**
Name of Facility: Creative Products Inc
Person to Contact: Jeff Smith
Address: 1420 Kiewetter St
Holland, OH 43528

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1420 Kieswetter St
Holland 123456789012345678, Ohio**

Description of proposed emissions unit(s):
1 spray(gelcoat)booth and 7 resin mixers.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit to Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

Creative Products Inc
PTI Application: 04-01237
Issued: 11/29/2001

Facility ID: 0448002090

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
Organic compounds	61.8
Particulate	0.80
Styrene	9.5

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
R001 -Gelcoat Spraybooth, SB #1	OAC rule 3745-31-05(A)(3)	6.7 pounds of Organic Compounds (OC) per hour from gelcoat application, 7.3 tons of OC per year from gelcoat application, 0.19 pound of particulate emissions (PE) per hour, 0.80 ton of PE per year, and see sections 2.a and 2.b.
	OAC rule 3745-31-05(D)	See section 2.c.
	OAC rule 3745-17-07(A)(1)	See section 2.d.
	OAC rule 3745-17-11(B)(1)	See section 2.e.
	OAC rule 3745-21-07(G)(2)	40 pounds of OC per day from gelcoat application, and see section 2.f.

2. Additional Terms and Conditions

- 2.a The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1) and the 40 pounds of OC per day emission limitation of OAC rule 3745-21-07(G)(2).
- 2.b The combined OC emissions from cleanup materials utilized in emissions units R001,

Emissions Unit ID: **R001**

P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of OC (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	10.0
1-11	11.0
1-12	20.0

After the first 12 calendar months of operation, compliance with the annual emission limitation for OC from cleanup materials shall be based upon a rolling, 12-month summation of the monthly OC emissions.

- 2.c** The combined styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons of styrene as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of Styrene (Tons)
----------	--

9

Creai

PTI A

Issued: 11/29/2001

Emissions Unit ID: **R001**

1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0

1-9	9.0
1-10	9.0
1-11	9.0
1-12	9.5

After the first 12 calendar months of operation, compliance with the annual emission limitation for styrene shall be based upon a rolling, 12-month summation of the monthly styrene emissions.

- 2.d** Visible emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
- 2.e** The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.f** The 8 pounds of OC per hour emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

1. The maximum styrene monomer weight percent, as applied, for the gelcoats employed in this emissions unit shall not exceed the following:
 - a. clear gelcoats - forty four percent (44%)
 - b. all other gelcoats - thirty percent (30%)
2. The use of photochemically reactive cleanup materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
3. The use of cleanup materials containing Hazardous Air Pollutants (HAPs), as defined in 112(G) of the Clean Air Act, in this emissions unit is prohibited.
4. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the name and identification of each gelcoat (resin and catalyst) employed;

- b. the OC content of each gelcoat, in pounds per ton, as applied;
- c. the weight of each gelcoat applied, in tons;
- d. the total daily OC emissions, calculated as a summation of (b) times (c) for each resin and catalyst employed, in pounds per day, assuming a 100% OC loss for the catalyst and an OC emission rate for each gelcoat, in pounds of OC (as styrene) per ton of gelcoat processed, evaluated using Table 3 Unified Emission Factor (UEF) Table, page 20 of "Technical Discussion of the Unified Emissions Factors for Open Molding of Composites" by R. Haberlein, Engineering Environmental Consulting Services, dated April 7, 1999 and supplied by the Composites Fabricators Association, (e.g., 522 pounds of styrene per ton of a 44% styrene gelcoat);
- e. the total number of hours the emissions unit was in operation;
- f. the average hourly OC emission rate for the gelcoat, i.e., (d)/(e), in pounds per hour (average); and
- g. the rolling, 12-month total OC emissions from the gelcoat (resin and catalyst), calculated as a summation of the total daily OC emissions from the gelcoat (resin and catalyst) recorded in (d).

[Note: The gelcoat information must be for the resin as employed, including any catalysts and thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each cleanup material employed;
 - b. the OC content of each cleanup material, in pounds per gallon;
 - c. the number of gallons of each cleanup material utilized;
 - d. the total monthly OC emissions from the cleanup materials, calculated as a summation of (b) times (c) for each cleanup material employed, in pounds per month; and
 - e. the rolling, 12-month total OC emissions from the clean up materials for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the total monthly OC emissions from the cleanup materials recorded in (d).

- f. documentation on whether or not each cleanup material employed is a photochemically reactive material;
- g. documentation on the HAP content of each cleanup material employed.

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

- 3. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each gelcoat, resin and catalyst employed;
 - b. the weight fraction of styrene monomer (in percent by weight) for each gelcoat, resin and catalyst, as applied;
 - c. the styrene emission rate for each gelcoat spray application, in pounds of styrene per ton of gelcoat processed, evaluated using: for gelcoat application, Table 3 Unified Emission Factor (UEF) Table, page 20 of "Technical Discussion of the Unified Emissions Factors for Open Molding of Composites" by R. Haberlein, Engineering Environmental Consulting Services, dated April 7, 1999 and supplied by the Composites Fabricators Association, (e.g., 522 pounds of styrene per ton of a 44% styrene gelcoat); and for each closed molding operation, the styrene emission rate evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);
 - d. the weight of each gelcoat, resin and catalyst applied, in tons;
 - e. the total monthly styrene emissions, calculated as a summation of (c) times (d) for each gelcoat, resin and catalyst employed.
 - f. the rolling, 12-month total styrene emissions for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the monthly styrene emissions for all gelcoats or resins and catalysts recorded in (e).
- 4. 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.
- 5. The permit to install for the combined emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 was evaluated based on the actual materials (gelcoats, resins,

Emissions Unit ID: R001

catalysts 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 monomer

TLV (mg/m³): 85,200

Maximum Hourly Emission Rate (lbs/hr): 14.4

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 1979

MAGLC (ug/m³): 2,028

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.).

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.

6. 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the emissions limitations established under this permit.
2. The permittee shall submit deviation (excursion) reports which identify all periods of time that a noncomplying gelcoat (i.e., for weight fraction of styrene monomer) was employed.
3. The permittee shall submit deviation (excursion) reports which identify all periods of time that a photochemically reactive cleanup material was employed or a cleanup material containing HAPs was employed.
4. The permittee shall notify the Toledo Division of Environmental Services 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 Toledo Division of Environmental Services within 30 days after the event occurs.
5. Except as otherwise specified, the above reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

E. Testing Requirements

1. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

- a. Emission Limitation

6.7 pounds of OC per hour from gelcoat application.

Applicable Compliance Method

The hourly emissions limitation represents the potential to emit for this emissions unit, i.e., the maximum usage rate of 25 pounds of gelcoat per hour, 44% maximum styrene monomer weight percent allowed under the restrictions of this permit and a maximum catalyst OC concentration of 2%, calculated using the equations in condition C.1. above. If required the permittee shall also perform stack testing utilizing the methods and procedures of Method 25 of 40 CFR 60, Appendix A.

- b. Emission Limitation

40 pounds of OC per day from gelcoat application.

Applicable Compliance Method

Compliance with the monthly and annual emission limitations shall be determined by the record keeping required in condition C.1.d.

c. Emission Limitation

7.3 tons of OC per year from gelcoat application.

Applicable Compliance Method

The 7.3 TPY emission limitation was developed by multiplying the 40 lb/day emission rate by a maximum operating schedule of 365 days/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the daily limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation

OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.2.

e. Emission Limitation

styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.3.

d. Emission Limitation

Visible emissions shall not exceed 20% opacity as a 6-minute average, except as provided

17

Cre

PTI A

Issued: 11/29/2001

Emissions Unit ID: **R001**

by rule.

Applicable Compliance Method

If required, the permittee shall demonstrate compliance by visible emission readings performed in compliance with the methods and procedures of OAC rule 3745-17-03(B)(1).

e. Emission Limitation

0.19 pound of PE hour and 0.80 ton PE per year.

Applicable Compliance Method

Compliance with the hourly emission limitation shall be demonstrated by multiplying the maximum usage rate of 25 pounds coating per hour by the maximum % solids [1 - 0.44] by the transfer efficiency [1 - 0.35] times the control efficiency of the dry filtration system [1 - 0.98]. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by 8760 hours per year and dividing by 2000 pounds per ton and by the record keeping required in condition C.4. If required, the permittee shall also demonstrate compliance with the hourly limitation by stack testing in performed in compliance with the methods and procedures of OAC rule 3745-17-03(B)(10).

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P001 - 50 pound mixer and associated closed molding process, 50-1	OAC rule 3745-31-05(A)(3)	0.47 pounds of Organic Compounds (OC) per hour from resin mixing and molding, 2.1 tons of OC per year from resin mixing and molding, and see section 2.a.
	OAC rule 3745-31-05(D)	See section 2.b.
	OAC rule 3745-21-07(G)(2)	See section 2.c.

2. Additional Terms and Conditions

- 2.a The combined OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of OC (Tons)
1	1.0
1-2	2.0
1-3	3.0

1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	10.0
1-11	11.0
1-12	20.0

After the first 12 calendar months of operation, compliance with the annual emission limitation for OC from cleanup materials shall be based upon a rolling, 12-month summation of the monthly OC emissions.

- 2.b** The combined styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons of styrene as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of Styrene (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	9.0
1-11	9.0
1-12	9.5

After the first 12 calendar months of operation, compliance with the annual emission limitation for styrene shall be based upon a rolling, 12-month summation of the monthly

styrene emissions.

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

B. Operational Restrictions

1. The maximum styrene monomer weight percent, as applied, for the resins employed in this emissions unit shall not exceed the following:
 - a. pigmented resins used in the veining process- eighteen percent (18%)
 - b. all other polyester resins - thirty-four percent (34%).
2. The use of photochemically reactive cleanup materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
3. The use of cleanup materials containing Hazardous Air Pollutants (HAPs), as defined in 112(G) of the Clean Air Act, in this emissions unit is prohibited.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the name and identification of each resin and catalyst employed;
 - b. the OC content of each resin and catalyst, in pounds per ton, as applied;
 - c. the weight of each resin and catalyst applied, in tons;
 - d. the total daily OC emissions, calculated as a summation of (b) times (c) for each resin and catalyst employed, in pounds per day, assuming a 100% emission rate for each catalyst and an OC emission rate for each resin (as styrene) evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate for the resin and catalyst, i.e., (d)/(e), in pounds per hour (average).

[Note: The information must be for the resin as employed, including any catalysts and thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each cleanup material employed;
 - b. the OC content of each cleanup material, in pounds per gallon;
 - c. the number of gallons of each cleanup material utilized;
 - d. the total monthly OC emissions from the cleanup materials, calculated as a summation of (b) times (c) for each cleanup material employed, in pounds per month; and
 - e. the rolling, 12-month total OC emissions from the clean up materials for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the total monthly OC emissions from the cleanup materials recorded in (d).
 - f. documentation on whether or not each cleanup material employed is a photochemically reactive material;
 - g. documentation on the HAP content of each cleanup material employed.

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

3. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each gelcoat, resin and catalyst employed;
 - b. the weight fraction of styrene monomer (in percent by weight) for each gelcoat, resin and catalyst, as applied;
 - c. the styrene emission rate for each gelcoat spray application, in pounds of styrene per ton of gelcoat processed, evaluated using: for gelcoat application, Table 3 Unified Emission Factor (UEF) Table, page 20 of "Technical Discussion of the Unified Emissions Factors for Open Molding of Composites" by R. Haberlein, Engineering Environmental Consulting

Services, dated April 7, 1999 and supplied by the Composites Fabricators Association, (e.g., 522 pounds of styrene per ton of a 44% styrene gelcoat); and for each closed molding operation, the styrene emission rate evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);

- d. the weight of each gelcoat, resin and catalyst applied, in tons;
 - e. the total monthly styrene emissions, calculated as a summation of (c) times (d) for each gelcoat, resin and catalyst employed.
 - f. the rolling, 12-month total styrene emissions for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the monthly styrene emissions for all gelcoats or resins and catalysts recorded in (e).
4. The permit to install for the combined emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 was evaluated based on the actual materials (gelcoats and resins) 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 monomer

TLV (mg/m³): 85,200

Maximum Hourly Emission Rate (lbs/hr): 14.4

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 1979

MAGLC (ug/m³): 2,028

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.).

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.

5. 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the emissions limitations established under this permit.

2. The permittee shall submit deviation (excursion) reports which identify all periods of time that a noncomplying resin (i.e., for weight fraction of styrene monomer) was employed.
3. The permittee shall submit deviation (excursion) reports which identify all periods of time that a photochemically reactive cleanup material was employed or a cleanup material containing HAPs was employed.
4. Except as otherwise specified, the above reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

E. Testing Requirements

1. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

a. Emission Limitation

0.47 pounds of OC per hour from resin mixing and molding.

Applicable Compliance Method

The hourly emissions limitation represents the potential to emit for this emissions unit, i.e., the maximum usage rate of 30 pounds of resin and catalyst per hour and the 34% maximum styrene monomer weight percent allowed under the restrictions of this permit, and a maximum catalyst OC concentration of 2%, calculated using the equations in condition C.1. above. If required the permittee shall also perform stack testing utilizing the methods and procedures of Method 25 of 40 CFR 60, Appendix A.

b. Emission Limitation

2.1 tons of OC per year from resin mixing and molding.

Applicable Compliance Method

The annual emission limitation was developed by multiplying the 0.47 lb/hr OC emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the daily limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation

OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.2.

d. Emission Limitation

styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.3.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P002 - 100 pound mixer and associated closed molding process, 100-1	OAC rule 3745-31-05(A)(3)	0.78 pounds of Organic Compounds (OC) per hour from resin mixing and molding, 3.5 tons of OC per year from resin mixing and molding, and see section 2.a.
	OAC rule 3745-31-05(D)	See section 2.b.
	OAC rule 3745-21-07(G)(2)	See section 2.c.

2. Additional Terms and Conditions

- 2.a The combined OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of OC (Tons)
1	1.0
1-2	2.0
1-3	3.0

1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	10.0
1-11	11.0
1-12	20.0

After the first 12 calendar months of operation, compliance with the annual emission limitation for OC from cleanup materials shall be based upon a rolling, 12-month summation of the monthly OC emissions.

- 2.b** The combined styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons of styrene as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of Styrene (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	9.0
1-11	9.0
1-12	9.5

After the first 12 calendar months of operation, compliance with the annual emission limitation for styrene shall be based upon a rolling, 12-month summation of the monthly

styrene emissions.

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

B. Operational Restrictions

1. The maximum styrene monomer weight percent, as applied, for the resins employed in this emissions unit shall not exceed the following:
 - a. pigmented resins used in the veining process- eighteen percent (18%)
 - b. all other polyester resins - thirty-four percent (34%).
2. The use of photochemically reactive cleanup materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
3. The use of cleanup materials containing Hazardous Air Pollutants (HAPs), as defined in 112(G) of the Clean Air Act, in this emissions unit is prohibited.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the name and identification of each resin and catalyst employed;
 - b. the OC content of each resin and catalyst, in pounds per ton, as applied;
 - c. the weight of each resin and catalyst applied, in tons;
 - d. the total daily OC emissions, calculated as a summation of (b) times (c) for each resin and catalyst employed, in pounds per day, assuming a 100% emission rate for each catalyst and an OC emission rate for each resin (as styrene) evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate for the resin and catalyst, i.e., (d)/(e), in pounds per hour (average).

Emissions Unit ID: **P002**

[Note: The information must be for the resin as employed, including any catalysts and thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each cleanup material employed;
 - b. the OC content of each cleanup material, in pounds per gallon;
 - c. the number of gallons of each cleanup material utilized;
 - d. the total monthly OC emissions from the cleanup materials, calculated as a summation of (b) times (c) for each cleanup material employed, in pounds per month; and

- e. the rolling, 12-month total OC emissions from the clean up materials for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the total monthly OC emissions from the cleanup materials recorded in (d).
- f. documentation on whether or not each cleanup material employed is a photochemically reactive material;
- g. documentation on the HAP content of each cleanup material employed.

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

- 3. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each gelcoat, resin and catalyst employed;
 - b. the weight fraction of styrene monomer (in percent by weight) for each gelcoat, resin and catalyst, as applied;
 - c. the styrene emission rate for each gelcoat spray application, in pounds of styrene per ton of gelcoat processed, evaluated using: for gelcoat application, Table 3 Unified Emission Factor (UEF) Table, page 20 of "Technical Discussion of the Unified Emissions Factors for Open Molding of Composites" by R. Haberlein, Engineering Environmental Consulting Services, dated April 7, 1999 and supplied by the Composites Fabricators Association, (e.g., 522 pounds of styrene per ton of a 44% styrene gelcoat); and for each closed molding operation, the styrene emission rate evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);
 - d. the weight of each gelcoat, resin and catalyst applied, in tons;
 - e. the total monthly styrene emissions, calculated as a summation of (c) times (d) for each gelcoat, resin and catalyst employed.
 - f. the rolling, 12-month total styrene emissions for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the monthly styrene emissions for all gelcoats or resins and catalysts recorded in (e).
- 4. The permit to install for the combined emissions from emissions units R001, P001, P002, P003,

P004, P005, P006 and P007 was evaluated based on the actual materials (gelcoats and resins) 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 monomer

TLV (mg/m³): 85,200

Maximum Hourly Emission Rate (lbs/hr): 14.4

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 1979

MAGLC (ug/m³): 2,028

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.).

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.

5. 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the emissions limitations established under this permit.
2. The permittee shall submit deviation (excursion) reports which identify all periods of time that a noncomplying resin (i.e., for weight fraction of styrene monomer) was employed.
3. The permittee shall submit deviation (excursion) reports which identify all periods of time that a photochemically reactive cleanup material was employed or a cleanup material containing HAPs was employed.
4. Except as otherwise specified, the above reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

E. Testing Requirements

1. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

a. Emission Limitation

0.78 pound of OC per hour from resin mixing and molding.

Applicable Compliance Method

The hourly emissions limitation represents the potential to emit for this emissions unit, i.e., the maximum usage rate of 50 pounds of resin and catalyst per hour and the 34% maximum styrene monomer weight percent allowed under the restrictions of this permit, and a maximum catalyst OC concentration of 2%, calculated using the equations in condition C.1. above. If required the permittee shall also perform stack testing utilizing the methods and procedures of Method 25 of 40 CFR 60, Appendix A.

b. Emission Limitation

3.5 tons of OC per year from resin mixing and molding.

Applicable Compliance Method

The annual emission limitation was developed by multiplying the 0.78 lb/hr OC emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the daily limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation

OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.2.

d. Emission Limitation

styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons as a rolling, 12-month summation.

Creative Products Inc
PTI Application: 04 01227
Issued

Facility ID: 0448002090

Emissions Unit ID: **P002**

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.3.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P003 - 100 pound mixer and associated closed molding process, 100-1	OAC rule 3745-31-05(A)(3)	0.78 pounds of Organic Compounds (OC) per hour from resin mixing and molding, 3.5 tons of OC per year from resin mixing and molding, and see section 2.a.
	OAC rule 3745-31-05(D)	See section 2.b.
	OAC rule 3745-21-07(G)(2)	See section 2.c.

2. Additional Terms and Conditions

- 2.a The combined OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of OC (Tons)
1	1.0
1-2	2.0

1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	10.0
1-11	11.0
1-12	20.0

After the first 12 calendar months of operation, compliance with the annual emission limitation for OC from cleanup materials shall be based upon a rolling, 12-month summation of the monthly OC emissions.

- 2.b** The combined styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons of styrene as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of Styrene (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	9.0
1-11	9.0
1-12	9.5

After the first 12 calendar months of operation, compliance with the annual emission

limitation for styrene shall be based upon a rolling, 12-month summation of the monthly styrene emissions.

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

B. Operational Restrictions

1. The maximum styrene monomer weight percent, as applied, for the resins employed in this emissions unit shall not exceed the following:
 - a. pigmented resins used in the veining process- eighteen percent (18%)
 - b. all other polyester resins - thirty-four percent (34%).
2. The use of photochemically reactive cleanup materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
3. The use of cleanup materials containing Hazardous Air Pollutants (HAPs), as defined in 112(G) of the Clean Air Act, in this emissions unit is prohibited.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the name and identification of each resin and catalyst employed;
 - b. the OC content of each resin and catalyst, in pounds per ton, as applied;
 - c. the weight of each resin and catalyst applied, in tons;
 - d. the total daily OC emissions, calculated as a summation of (b) times (c) for each resin and catalyst employed, in pounds per day, assuming a 100% emission rate for each catalyst and an OC emission rate for each resin (as styrene) evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate for the resin and catalyst, i.e., (d)/(e), in pounds per hour (average).

[Note: The information must be for the resin as employed, including any catalysts and thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each cleanup material employed;
 - b. the OC content of each cleanup material, in pounds per gallon;
 - c. the number of gallons of each cleanup material utilized;
 - d. the total monthly OC emissions from the cleanup materials, calculated as a summation of (b) times (c) for each cleanup material employed, in pounds per month; and

- e. the rolling, 12-month total OC emissions from the clean up materials for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the total monthly OC emissions from the cleanup materials recorded in (d).
- f. documentation on whether or not each cleanup material employed is a photochemically reactive material;
- g. documentation on the HAP content of each cleanup material employed.

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

- 3. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each gelcoat, resin and catalyst employed;
 - b. the weight fraction of styrene monomer (in percent by weight) for each gelcoat, resin and catalyst, as applied;
 - c. the styrene emission rate for each gelcoat spray application, in pounds of styrene per ton of gelcoat processed, evaluated using: for gelcoat application, Table 3 Unified Emission Factor (UEF) Table, page 20 of "Technical Discussion of the Unified Emissions Factors for Open Molding of Composites" by R. Haberlein, Engineering Environmental Consulting Services, dated April 7, 1999 and supplied by the Composites Fabricators Association, (e.g., 522 pounds of styrene per ton of a 44% styrene gelcoat); and for each closed molding operation, the styrene emission rate evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);
 - d. the weight of each gelcoat, resin and catalyst applied, in tons;
 - e. the total monthly styrene emissions, calculated as a summation of (c) times (d) for each gelcoat, resin and catalyst employed.
 - f. the rolling, 12-month total styrene emissions for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the monthly styrene emissions for all gelcoats resins and catalysts recorded in (e).
- 4. The permit to install for the combined emissions from emissions units R001, P001, P002, P003,

P004, P005, P006 and P007 was evaluated based on the actual materials (gelcoats and resins) 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 monomer

TLV (mg/m³): 85,200

Maximum Hourly Emission Rate (lbs/hr): 14.4

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 1979

MAGLC (ug/m³): 2,028

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.).

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.

5. 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the emissions limitations established under this permit.
2. The permittee shall submit deviation (excursion) reports which identify all periods of time that a noncomplying resin (i.e., for weight fraction of styrene monomer) was employed.
3. The permittee shall submit deviation (excursion) reports which identify all periods of time that a photochemically reactive cleanup material was employed or a cleanup material containing HAPs was employed.
4. Except as otherwise specified, the above reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

E. Testing Requirements

1. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

a. Emission Limitation

0.78 pound of OC per hour from resin mixing and molding.

Applicable Compliance Method

The hourly emissions limitation represents the potential to emit for this emissions unit, i.e., the maximum usage rate of 50 pounds of resin and catalyst per hour and the 34% maximum styrene monomer weight percent allowed under the restrictions of this permit, and a maximum catalyst OC concentration of 2%, calculated using the equations in condition C.1. above. If required the permittee shall also perform stack testing utilizing the methods and procedures of Method 25 of 40 CFR 60, Appendix A.

b. Emission Limitation

3.5 tons of OC per year from resin mixing and molding.

Applicable Compliance Method

The annual emission limitation was developed by multiplying the 0.78 lb/hr OC emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the daily limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation

OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.2.

d. Emission Limitation

styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons as a rolling, 12-month summation.

Creative Products Inc
PTI Application: 04 01227
Issued

Facility ID: 0448002090

Emissions Unit ID: **P003**

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.3.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P004 - 100 pound mixer and associated closed molding process, 100-1	OAC rule 3745-31-05(A)(3)	0.78 pounds of Organic Compounds (OC) per hour from resin mixing and molding, 3.5 tons of OC per year from resin mixing and molding, and see section 2.a.
	OAC rule 3745-31-05(D)	See section 2.b.
	OAC rule 3745-21-07(G)(2)	See section 2.c.

2. Additional Terms and Conditions

- 2.a The combined OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of OC (Tons)
1	1.0
1-2	2.0

1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	10.0
1-11	11.0
1-12	20.0

After the first 12 calendar months of operation, compliance with the annual emission limitation for OC from cleanup materials shall be based upon a rolling, 12-month summation of the monthly OC emissions.

- 2.b** The combined styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons of styrene as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of Styrene (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	9.0
1-11	9.0
1-12	9.5

After the first 12 calendar months of operation, compliance with the annual emission

limitation for styrene shall be based upon a rolling, 12-month summation of the monthly styrene emissions.

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

B. Operational Restrictions

1. The maximum styrene monomer weight percent, as applied, for the resins employed in this emissions unit shall not exceed the following:
 - a. pigmented resins used in the veining process- eighteen percent (18%)
 - b. all other polyester resins - thirty-four percent (34%).
2. The use of photochemically reactive cleanup materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
3. The use of cleanup materials containing Hazardous Air Pollutants (HAPs), as defined in 112(G) of the Clean Air Act, in this emissions unit is prohibited.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the name and identification of each resin and catalyst employed;
 - b. the OC content of each resin and catalyst, in pounds per ton, as applied;
 - c. the weight of each resin and catalyst applied, in tons;
 - d. the total daily OC emissions, calculated as a summation of (b) times (c) for each resin and catalyst employed, in pounds per day, assuming a 100% emission rate for each catalyst and an OC emission rate for each resin (as styrene) evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate for the resin and catalyst, i.e., (d)/(e), in pounds per

hour (average).

[Note: The information must be for the resin as employed, including any catalysts and thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each cleanup material employed;
 - b. the OC content of each cleanup material, in pounds per gallon;
 - c. the number of gallons of each cleanup material utilized;
 - d. the total monthly OC emissions from the cleanup materials, calculated as a summation of (b) times (c) for each cleanup material employed, in pounds per month; and
 - e. the rolling, 12-month total OC emissions from the clean up materials for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the total monthly OC emissions from the cleanup materials recorded in (d).
 - f. documentation on whether or not each cleanup material employed is a photochemically reactive material;
 - g. documentation on the HAP content of each cleanup material employed.

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

3. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each gelcoat, resin and catalyst employed;
 - b. the weight fraction of styrene monomer (in percent by weight) for each gelcoat, resin and catalyst, as applied;
 - c. the styrene emission rate for each gelcoat spray application, in pounds of styrene per ton of gelcoat processed, evaluated using: for gelcoat application, Table 3 Unified Emission Factor (UEF) Table, page 20 of "Technical Discussion of the Unified Emissions Factors for Open Molding of Composites" by R. Haberlein, Engineering Environmental Consulting

Services, dated April 7, 1999 and supplied by the Composites Fabricators Association, (e.g., 522 pounds of styrene per ton of a 44% styrene gelcoat); and for each closed molding operation, the styrene emission rate evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);

- d. the weight of each gelcoat, resin and catalyst applied, in tons;
 - e. the total monthly styrene emissions, calculated as a summation of (c) times (d) for each gelcoat, resin and catalyst employed.
 - f. the rolling, 12-month total styrene emissions for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the monthly styrene emissions for all gelcoats, resins and catalysts recorded in (e).
4. The permit to install for the combined emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 was evaluated based on the actual materials (gelcoats and resins) 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 monomer

TLV (mg/m³): 85,200

Maximum Hourly Emission Rate (lbs/hr): 14.4

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 1979

MAGLC (ug/m³): 2,028

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.).

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

Emissions Unit ID: **P004**

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.

5. 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the emissions limitations established under this permit.
2. The permittee shall submit deviation (excursion) reports which identify all periods of time that a noncomplying resin (i.e., for weight fraction of styrene monomer) was employed.
3. The permittee shall submit deviation (excursion) reports which identify all periods of time that a photochemically reactive cleanup material was employed or a cleanup material containing HAPs was employed.
4. Except as otherwise specified, the above reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

E. Testing Requirements

1. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:
 - a. Emission Limitation

0.78 pound of OC per hour from resin mixing and molding.

Applicable Compliance Method

The hourly emissions limitation represents the potential to emit for this emissions unit, i.e., the maximum usage rate of 50 pounds of resin and catalyst per hour and the 34% maximum styrene monomer weight percent allowed under the restrictions of this permit, and a maximum catalyst OC concentration of 2%, calculated using the equations in condition C.1. above. If required the permittee shall also perform stack testing utilizing the methods and procedures of Method 25 of 40 CFR 60, Appendix A.

b. Emission Limitation

3.5 tons of OC per year from resin mixing and molding.

Applicable Compliance Method

The annual emission limitation was developed by multiplying the 0.78 lb/hr OC emission rate by a maximum operating schedule of 8760 hours/year and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the daily limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation

OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.2.

d. Emission Limitation

styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.3.

Creative Products Inc
PTI Application: 04 01227
Issued

Facility ID: 0448002090

Emissions Unit ID: **P004**

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P005 - 250 pound mixer and associated closed molding process, 250-1	OAC rule 3745-31-05(A)(3)	2.9 pounds of Organic Compounds (OC) per hour from resin mixing and molding, 7.3 tons of OC per year from resin mixing and molding, and see sections 2.a and 2.b.
	OAC rule 3745-31-05(D)	See section 2.c.
	OAC rule 3745-21-07(G)(2)	40 pounds of OC per day from resin mixing and molding, and see section 2.d.

2. Additional Terms and Conditions

- 2.a The requirements established pursuant to this rule are equivalent to the requirements of the 40 pounds of OC per day emission limitation of OAC rule 3745-21-07(G)(2).
- 2.b The combined OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Maximum Allowable
Cumulative Emissions

Month(s)	of OC (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	10.0
1-11	11.0
1-12	20.0

After the first 12 calendar months of operation, compliance with the annual emission limitation for OC from cleanup materials shall be based upon a rolling, 12-month summation of the monthly OC emissions.

- 2.c** The combined styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons of styrene as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of Styrene (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	9.0

1-11	9.0
1-12	9.5

After the first 12 calendar months of operation, compliance with the annual emission limitation for styrene shall be based upon a rolling, 12-month summation of the monthly styrene emissions.

- 2.d** The 8 pounds of OC per hour emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

1. The maximum styrene monomer weight percent, as applied, for the resins employed in this emissions unit shall not exceed the following:
 - a. pigmented resins used in the veining process- eighteen percent (18%)
 - b. all other polyester resins - thirty-four percent (34%).
2. The use of photochemically reactive cleanup materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
3. The use of cleanup materials containing Hazardous Air Pollutants (HAPs), as defined in 112(G) of the Clean Air Act, in this emissions unit is prohibited.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the name and identification of each resin and catalyst employed;
 - b. the OC content of each resin and catalyst, in pounds per ton, as applied;
 - c. the weight of each resin and catalyst applied, in tons;
 - d. the total daily OC emissions, calculated as a summation of (b) times (c) for each resin and catalyst employed, in pounds per day, assuming a 100% emission rate for each catalyst and an OC emission rate for each resin (as styrene) evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);

- e. the total number of hours the emissions unit was in operation;
- f. the average hourly OC emission rate for the resin and catalyst, i.e., (d)/(e), in pounds per hour (average); and
- g. the rolling, 12-month total OC emissions from the resin and catalyst, calculated as a summation of the total daily OC emissions from the resin and catalyst recorded in (d).

[Note: The information must be for the resin as employed, including any catalysts and thinning solvents added at the emissions unit.]

- 2. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each cleanup material employed;
 - b. the OC content of each cleanup material, in pounds per gallon;
 - c. the number of gallons of each cleanup material utilized;
 - d. the total monthly OC emissions from the cleanup materials, calculated as a summation of (b) times (c) for each cleanup material employed, in pounds per month; and
 - e. the rolling, 12-month total OC emissions from the clean up materials for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the total monthly OC emissions from the cleanup materials recorded in (d).
 - f. documentation on whether or not each cleanup material employed is a photochemically reactive material;
 - g. documentation on the HAP content of each cleanup material employed.

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

- 3. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each gelcoat, resin and catalyst employed;

- b. the weight fraction of styrene monomer (in percent by weight) for each gelcoat, resin and catalyst, as applied;
 - c. the styrene emission rate for each gelcoat spray application, in pounds of styrene per ton of gelcoat processed, evaluated using: for gelcoat application, Table 3 Unified Emission Factor (UEF) Table, page 20 of "Technical Discussion of the Unified Emissions Factors for Open Molding of Composites" by R. Haberlein, Engineering Environmental Consulting Services, dated April 7, 1999 and supplied by the Composites Fabricators Association, (e.g., 522 pounds of styrene per ton of a 44% styrene gelcoat); and for each closed molding operation, the styrene emission rate evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);
 - d. the weight of each gelcoat, resin and catalyst applied, in tons;
 - e. the total monthly styrene emissions, calculated as a summation of (c) times (d) for each gelcoat, resin and catalyst employed.
 - f. the rolling, 12-month total styrene emissions for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the monthly styrene emissions for all gelcoats, resins and catalysts recorded in (e).
4. The permit to install for the combined emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 was evaluated based on the actual materials (gelcoats and resins) 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 monomer

TLV (mg/m³): 85,200

Maximum Hourly Emission Rate (lbs/hr): 14.4

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m³): 1979

MAGLC (ug/m3): 2,028

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.).

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.

5. 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the emissions limitations established under this permit.
2. The permittee shall submit deviation (excursion) reports which identify all periods of time that a noncomplying resin (i.e., for weight fraction of styrene monomer) was employed.
3. The permittee shall submit deviation (excursion) reports which identify all periods of time that a photochemically reactive cleanup material was employed or a cleanup material containing HAPs was employed.
4. Except as otherwise specified, the above reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

E. Testing Requirements

1. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

- a. Emission Limitation

2.9 pounds of OC per hour from resin mixing and molding.

Applicable Compliance Method

The hourly emissions limitation represents the potential to emit for this emissions unit, i.e., the maximum usage rate of 184 pounds of resin and catalyst per hour and the 34% maximum styrene monomer weight percent allowed under the restrictions of this permit, and a maximum catalyst OC concentration of 2%, calculated using the equations in condition C.1. above. If required the permittee shall also perform stack testing utilizing the methods and procedures of Method 25 of 40 CFR 60, Appendix A.

- b. Emission Limitation

40 pounds of OC per day from resin mixing and molding.

Applicable Compliance Method

Emissions Unit ID: **P005**

Compliance with the monthly and annual emission limitations shall be determined by the record keeping required in condition C.1.

c. Emission Limitation

7.3 tons of OC per year from resin mixing and molding.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.1.

d. Emission Limitation

OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.2.

e. Emission Limitation

styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.3.

62

Creai

PTI A

Issued: 11/29/2001

Emissions Unit ID: **P005**

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P006 - 250 pound mixer and associated closed molding process, 250-2	OAC rule 3745-31-05(A)(3)	2.9 pounds of Organic Compounds (OC) per hour from resin mixing and molding, 7.3 tons of OC per year from resin mixing and molding, and see sections 2.a and 2.b.
	OAC rule 3745-31-05(D)	See section 2.c.
	OAC rule 3745-21-07(G)(2)	40 pounds of OC per day from resin mixing and molding, and see section 2.d.

2. Additional Terms and Conditions

- 2.a The requirements established pursuant to this rule are equivalent to the requirements of the 40 pounds of OC per day emission limitation of OAC rule 3745-21-07(G)(2).
- 2.b The combined OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Maximum Allowable

Month(s)	Cumulative Emissions of OC (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	10.0
1-11	11.0
1-12	20.0

After the first 12 calendar months of operation, compliance with the annual emission limitation for OC from cleanup materials shall be based upon a rolling, 12-month summation of the monthly OC emissions.

- 2.c** The combined styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons of styrene as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of Styrene (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0

1-10	9.0
1-11	9.0
1-12	9.5

After the first 12 calendar months of operation, compliance with the annual emission limitation for styrene shall be based upon a rolling, 12-month summation of the monthly styrene emissions.

- 2.d** The 8 pounds of OC per hour emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

1. The maximum styrene monomer weight percent, as applied, for the resins employed in this emissions unit shall not exceed the following:
 - a. pigmented resins used in the veining process- eighteen percent (18%)
 - b. all other polyester resins - thirty-four percent (34%).
2. The use of photochemically reactive cleanup materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
3. The use of cleanup materials containing Hazardous Air Pollutants (HAPs), as defined in 112(G) of the Clean Air Act, in this emissions unit is prohibited.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the name and identification of each resin and catalyst employed;
 - b. the OC content of each resin and catalyst, in pounds per ton, as applied;
 - c. the weight of each resin and catalyst applied, in tons;
 - d. the total daily OC emissions, calculated as a summation of (b) times (c) for each resin and catalyst employed, in pounds per day, assuming a 100% emission rate for each catalyst and an OC emission rate for each resin (as styrene) evaluated using an emission factor of

Emissions Unit ID: **P006**

3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);

- e. the total number of hours the emissions unit was in operation;
- f. the average hourly OC emission rate for the resin and catalyst, i.e., (d)/(e), in pounds per hour (average); and
- g. the rolling, 12-month total OC emissions from the resin and catalyst, calculated as a summation of the total daily OC emissions from the resin and catalyst recorded in (d).

[Note: The information must be for the resin as employed, including any catalysts and thinning solvents added at the emissions unit.]

- 2. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each cleanup material employed;
 - b. the OC content of each cleanup material, in pounds per gallon;
 - c. the number of gallons of each cleanup material utilized;
 - d. the total monthly OC emissions from the cleanup materials, calculated as a summation of (b) times (c) for each cleanup material employed, in pounds per month; and
 - e. the rolling, 12-month total OC emissions from the clean up materials for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the total monthly OC emissions from the cleanup materials recorded in (d).
 - f. documentation on whether or not each cleanup material employed is a photochemically reactive material;
 - g. documentation on the HAP content of each cleanup material employed.

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

- 3. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each gelcoat, resin and catalyst employed;

- b. the weight fraction of styrene monomer (in percent by weight) for each gelcoat, resin and catalyst, as applied;
 - c. the styrene emission rate for each gelcoat spray application, in pounds of styrene per ton of gelcoat processed, evaluated using: for gelcoat application, Table 3 Unified Emission Factor (UEF) Table, page 20 of "Technical Discussion of the Unified Emissions Factors for Open Molding of Composites" by R. Haberlein, Engineering Environmental Consulting Services, dated April 7, 1999 and supplied by the Composites Fabricators Association, (e.g., 522 pounds of styrene per ton of a 44% styrene gelcoat); and for each closed molding operation, the styrene emission rate evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);
 - d. the weight of each gelcoat, resin and catalyst applied, in tons;
 - e. the total monthly styrene emissions, calculated as a summation of (c) times (d) for each gelcoat, resin and catalyst employed.
 - f. the rolling, 12-month total styrene emissions for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the monthly styrene emissions for all gelcoats, resins and catalysts recorded in (e).
4. The permit to install for the combined emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 was evaluated based on the actual materials (gelcoats and resins) 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 monomer

TLV (mg/m³): 85,200

Maximum Hourly Emission Rate (lbs/hr): 14.4

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 1979

MAGLC (ug/m3): 2,028

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.).

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.

5. 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the emissions limitations established under this permit.
2. The permittee shall submit deviation (excursion) reports which identify all periods of time that a noncomplying resin (i.e., for weight fraction of styrene monomer) was employed.
3. The permittee shall submit deviation (excursion) reports which identify all periods of time that a photochemically reactive cleanup material was employed or a cleanup material containing HAPs was employed.
4. Except as otherwise specified, the above reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

E. Testing Requirements

1. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:
 - a. Emission Limitation

2.9 pounds of OC per hour from resin mixing and molding.

Applicable Compliance Method

The hourly emissions limitation represents the potential to emit for this emissions unit, i.e., the maximum usage rate of 184 pounds of resin and catalyst per hour and the 34% maximum styrene monomer weight percent allowed under the restrictions of this permit, and a maximum catalyst OC concentration of 2%, calculated using the equations in condition C.1. above. If required the permittee shall also perform stack testing utilizing the methods and procedures of Method 25 of 40 CFR 60, Appendix A.
 - b. Emission Limitation

40 pounds of OC per day from resin mixing and molding.

Applicable Compliance Method

Compliance with the monthly and annual emission limitations shall be determined by the record keeping required in condition C.1.

c. Emission Limitation

7.3 tons of OC per year from resin mixing and molding.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.1.

d. Emission Limitation

OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.2.

e. Emission Limitation

styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons as a rolling, 12-month summation.

71

Creai

PTI A

Issued: 11/29/2001

Emissions Unit ID: **P006**

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.3.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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>
P007 - 300 pound mixer and associated closed molding process, 300-1	OAC rule 3745-31-05(A)(3)	3.6 pounds of Organic Compounds (OC) per hour from resin mixing and molding, 7.3 tons of OC per year from resin mixing and molding; and see section 2.a.
	OAC rule 3745-31-05(D)	See section 2.b.
	OAC rule 3745-21-07(G)(2)	40 pounds of OC per day from resin mixing and molding, and see section 2.c.

2. Additional Terms and Conditions

- 2.a The requirements established pursuant to this rule are equivalent to the requirements of the 40 pounds of OC per day emission limitation of OAC rule 3745-21-07(G)(2).
- 2.b The combined OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Maximum Allowable
Cumulative Emissions

Month(s)	of OC (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	10.0
1-11	11.0
1-12	20.0

After the first 12 calendar months of operation, compliance with the annual emission limitation for OC from cleanup materials shall be based upon a rolling, 12-month summation of the monthly OC emissions.

- 2.c** The combined styrene emissions from the resins and gelcoats utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons of styrene as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of Styrene (Tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	9.0

1-11	9.0
1-12	9.5

After the first 12 calendar months of operation, compliance with the annual emission limitation for styrene shall be based upon a rolling, 12-month summation of the monthly styrene emissions.

- 2.d** The 8 pounds of OC per hour emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

B. Operational Restrictions

1. The maximum styrene monomer weight percent, as applied, for the resins employed in this emissions unit shall not exceed the following:
 - a. pigmented resins used in the veining process- eighteen percent (18%)
 - b. all other polyester resins - thirty-four percent (34%).
2. The use of photochemically reactive cleanup materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit is prohibited.
3. The use of cleanup materials containing Hazardous Air Pollutants (HAPs), as defined in 112(G) of the Clean Air Act, in this emissions unit is prohibited.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following information for this emissions unit:
 - a. the name and identification of each resin and catalyst employed;
 - b. the OC content of each resin and catalyst, in pounds per ton, as applied;
 - c. the weight of each resin and catalyst applied, in tons;
 - d. the total daily OC emissions, calculated as a summation of (b) times (c) for each resin and catalyst employed, in pounds per day, assuming a 100% emission rate for each catalyst and an OC emission rate for each resin (as styrene) evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);

- e. the total number of hours the emissions unit was in operation;
- f. the average hourly OC emission rate for the resin and catalyst, i.e., (d)/(e), in pounds per hour (average); and
- g. the rolling, 12-month total OC emissions from the resin and catalyst, calculated as a summation of the total daily OC emissions from the resin and catalyst recorded in (d).

[Note: The information must be for the resin as employed, including any catalysts and thinning solvents added at the emissions unit.]

2. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each cleanup material employed;
 - b. the OC content of each cleanup material, in pounds per gallon;
 - c. the number of gallons of each cleanup material utilized;
 - d. the total monthly OC emissions from the cleanup materials, calculated as a summation of (b) times (c) for each cleanup material employed, in pounds per month; and
 - e. the rolling, 12-month total OC emissions from the clean up materials for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the total monthly OC emissions from the cleanup materials recorded in (d).
 - f. documentation on whether or not each cleanup material employed is a photochemically reactive material;
 - g. documentation on the HAP content of each cleanup material employed.

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

3. The permittee shall maintain monthly records of the following information for emissions units R001, P001, P002, P003, P004, P005, P006 and P007:
 - a. the name and identification of each gelcoat, resin and catalyst employed;

- b. the weight fraction of styrene monomer (in percent by weight) for each gelcoat, resin and catalyst, as applied;
 - c. the styrene emission rate for each gelcoat spray application, in pounds of styrene per ton of gelcoat processed, evaluated using: for gelcoat application, Table 3 Unified Emission Factor (UEF) Table, page 20 of "Technical Discussion of the Unified Emissions Factors for Open Molding of Composites" by R. Haberlein, Engineering Environmental Consulting Services, dated April 7, 1999 and supplied by the Composites Fabricators Association, (e.g., 522 pounds of styrene per ton of a 44% styrene gelcoat); and for each closed molding operation, the styrene emission rate evaluated using an emission factor of 3% by weight of the total styrene processed (AP-42, Table 4.12-2 dated 9/88);
 - d. the weight of each gelcoat, resin and catalyst applied, in tons;
 - e. the total monthly styrene emissions, calculated as a summation of (c) times (d) for each gelcoat, resin and catalyst employed.
 - f. the rolling, 12-month total styrene emissions for emissions units R001, P001, P002, P003, P004, P005, P006 and P007, calculated as a summation of the monthly styrene emissions for all gelcoats, resins and catalysts recorded in (e).
4. The permit to install for the combined emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 was evaluated based on the actual materials (gelcoats and resins) 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 monomer

TLV (mg/m³): 85,200

Maximum Hourly Emission Rate (lbs/hr): 14.4

Predicted 1-Hour Maximum Ground-Level

Concentration (ug/m3): 1979

MAGLC (ug/m3): 2,028

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.).

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.

5. 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.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify all exceedances of the emissions limitations established under this permit.
2. The permittee shall submit deviation (excursion) reports which identify all periods of time that a noncomplying resin (i.e., for weight fraction of styrene monomer) was employed.
3. The permittee shall submit deviation (excursion) reports which identify all periods of time that a photochemically reactive cleanup material was employed or a cleanup material containing HAPs was employed.
4. Except as otherwise specified, the above reports are due by the date described in Part I - General Terms and Conditions of this permit under section (A)(2).

E. Testing Requirements

1. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

- a. Emission Limitation

3.6 pounds of OC per hour from resin mixing and molding.

Applicable Compliance Method

The hourly emissions limitation represents the potential to emit for this emissions unit, i.e., the maximum usage rate of 228 pounds of resin and catalyst per hour and the 34% maximum styrene monomer weight percent allowed under the restrictions of this permit, and a maximum catalyst OC concentration of 2%, calculated using the equations in condition C.1. above. If required the permittee shall also perform stack testing utilizing the methods and procedures of Method 25 of 40 CFR 60, Appendix A.

- b. Emission Limitation

40 pounds of OC per day from resin mixing and molding.

Applicable Compliance Method

Compliance with the monthly and annual emission limitations shall be determined by the record keeping required in condition C.1.

c. Emission Limitation

7.3 tons of OC per year from resin mixing and molding.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.1.

d. Emission Limitation

OC emissions from cleanup materials utilized in emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 20 tons of OC as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.2.

e. Emission Limitation

styrene emissions from emissions units R001, P001, P002, P003, P004, P005, P006 and P007 shall not exceed 9.5 tons as a rolling, 12-month summation.

Applicable Compliance Method

Compliance with the annual emission limitations shall be determined by the record keeping required in condition C.3.

F. Miscellaneous Requirements

None

NEW SOURCE REVIEW FORM B

PTI Number: 04-01237 Facility ID: 0448002090

FACILITY NAME Creative Products, Inc.

FACILITY DESCRIPTION 1 spray(gelcoat)booth and 7 resin mixers. CITY/TWP Holland

SIC CODE 3089 SCC CODE 30800703 EMISSIONS UNIT ID R001

EMISSIONS UNIT DESCRIPTION Gelcoat Spraybooth, SB #1

DATE INSTALLED on issuance of permit

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter		0.19 lb/hr	0.02	0.19 lb/hr	0.80
PM ₁₀	Unclassifiable				
Sulfur Dioxide	Non-attainment				
Organic Compounds	Attainment	6.7 lb/hr	1.7	6.7 lb/hr, 40 lb/d	7.3
Nitrogen Oxides	Unclassifiable/Attainment				
Carbon Monoxide	Unclassifiable/Attainment				
Lead	Not Designated				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

limitations for this process were included by the NWDO in their recent PTI 03-08793 to be no control with styrene monomer content restrictions of 44% for clear gelcoats, 30% for all other gelcoats, 18% for pigmented resins and 33.5% for all other resins.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? x YES NO

IDENTIFY THE AIR CONTAMINANTS: styrene monomer

NEW SOURCE REVIEW FORM B

PTI Number: 04-01237

Facility ID: 0448002090

FACILITY NAME Creative Products, Inc.

FACILITY DESCRIPTION 1 sprav(gelcoat)booth and 7 resin mixers. CITY/TWP Holland

Emissions Unit ID: **P007**

SIC CODE 3089

SCC CODE 30800703

EMISSIONS UNIT ID P001

EMISSIONS UNIT DESCRIPTION 50 pound capacity resin, pigment and filler mixer (50-1).

DATE INSTALLED on issuance of permit

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀	Unclassifiable				
Sulfur Dioxide	Non-attainment				
Organic Compounds	Attainment	0.47 lb/hr	0.08	0.47 lb/hr	2.1
Nitrogen Oxides	Unclassifiable/Attainment				
Carbon Monoxide	Unclassifiable/Attainment				
Lead	Not Designated				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

limitations for this process were included by the NWDO in their recent PTI 03-08793 to be no control with styrene monomer content restrictions of 44% for clear gelcoats, 30% for all other gelcoats, 18% for pigmented resins and 33.5% for all other resins.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

\$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*?

x

YES

NO

IDENTIFY THE AIR CONTAMINANTS:

styrene monomer

NEW SOURCE REVIEW FORM B

PTI Number: 04-01237

Facility ID: 0448002090

FACILITY NAME Creative Products, Inc.

FACILITY DESCRIPTION 1 sprav(gelcoat)booth and 7 resin mixers. CITY/TWP Holland

Emissions Unit ID: **P007**

SIC CODE 3089

SCC CODE 30800703

EMISSIONS UNIT ID P002

EMISSIONS UNIT DESCRIPTION 100 pound capacity resin, pigment and filler mixer (100-1).

DATE INSTALLED on issuance of permit

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀	Unclassifiable				
Sulfur Dioxide	Non-attainment				
Organic Compounds	Attainment	0.78 lb/hr	0.20	0.78 lb/hr	3.5
Nitrogen Oxides	Unclassifiable/Attainment				
Carbon Monoxide	Unclassifiable/Attainment				
Lead	Not Designated				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

limitations for this process were included by the NWDO in their recent PTI 03-08793 to be no control with styrene monomer content restrictions of 44% for clear gelcoats, 30% for all other gelcoats, 18% for pigmented resins and 33.5% for all other resins.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

\$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*?

x

YES

NO

IDENTIFY THE AIR CONTAMINANTS:

styrene monomer

NEW SC

PTI Num

FACILITY

Emissions Unit ID: **P007** _____

FACILITY DESCRIPTION 1 spray(gelcoat)booth and 7 resin mixers. CITY/TWP Holland

SIC CODE 3089 SCC CODE 30800703 EMISSIONS UNIT ID P003

EMISSIONS UNIT DESCRIPTION 100 pound capacity resin, pigment and filler mixer (100-2).

DATE INSTALLED on issuance of permit

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀	Unclassifiable				
Sulfur Dioxide	Non-attainment				
Organic Compounds	Attainment	0.78 lb/hr	0.20	0.78 lb/hr	3.5
Nitrogen Oxides	Unclassifiable/Attainment				
Carbon Monoxide	Unclassifiable/Attainment				
Lead	Not Designated				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

limitations for this process were included by the NWDO in their recent PTI 03-08793 to be no control with styrene monomer content restrictions of 44% for clear gelcoats, 30% for all other gelcoats, 18% for pigmented resins and 33.5% for all other resins.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? x YES _____ NO _____

IDENTIFY THE AIR CONTAMINANTS: styrene monomer

NEW SOURCE REVIEW FORM B

PTI Number: 04-01237

Facility ID: 0448002090

FACILITY NAME Creative Products, Inc.

FACILITY DESCRIPTION 1 sprav(gelcoat)booth and 7 resin mixers. CITY/TWP Holland

Emissions Unit ID: **P007**

SIC CODE 3089

SCC CODE 30800703

EMISSIONS UNIT ID P004

EMISSIONS UNIT DESCRIPTION 100 pound capacity resin, pigment and filler mixer (100-3).

DATE INSTALLED on issuance of permit

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀	Unclassifiable				
Sulfur Dioxide	Non-attainment				
Organic Compounds	Attainment	0.78 lb/hr	0.20	0.78 lb/hr	3.5
Nitrogen Oxides	Unclassifiable/Attainment				
Carbon Monoxide	Unclassifiable/Attainment				
Lead	Not Designated				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

limitations for this process were included by the NWDO in their recent PTI 03-08793 to be no control with styrene monomer content restrictions of 44% for clear gelcoats, 30% for all other gelcoats, 18% for pigmented resins and 33.5% for all other resins.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

\$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*?

v

YES

NO

IDENTIFY THE AIR CONTAMINANTS:

styrene monomer

NEW SOURCE REVIEW FORM B

PTI Number: 04-01237

Facility ID: 0448002090

FACILITY NAME Creative Products, Inc.

FACILITY DESCRIPTION 1 sprav(gelcoat)booth and 7 resin mixers. CITY/TWP Holland

Emissions Unit ID: **P007**

SIC CODE 3089

SCC CODE 30800703

EMISSIONS UNIT ID P005

EMISSIONS UNIT DESCRIPTION 250 pound capacity resin, pigment and filler mixer (250-1).

DATE INSTALLED on issuance of permit

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀	Unclassifiable				
Sulfur Dioxide	Non-attainment				
Organic Compounds	Attainment	2.9 lb/hr	4.2	2.9 lb/hr, 40 lb/d	7.3
Nitrogen Oxides	Unclassifiable/Attainment				
Carbon Monoxide	Unclassifiable/Attainment				
Lead	Not Designated				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

limitations for this process were included by the NWDO in their recent PTI 03-08793 to be no control with styrene monomer content restrictions of 44% for clear gelcoats, 30% for all other gelcoats, 18% for pigmented resins and 33.5% for all other resins.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT?

\$

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*?

x

YES

NO

IDENTIFY THE AIR CONTAMINANTS:

styrene monomer

NEW SC

PTI Num

FACILITY

Emissions Unit ID: **P007** _____

FACILITY DESCRIPTION 1 spray(gelcoat)booth and 7 resin mixers. CITY/TWP Holland

SIC CODE 3089 SCC CODE 30800703 EMISSIONS UNIT ID P006

EMISSIONS UNIT DESCRIPTION 250 pound capacity resin, pigment and filler mixer (250-2).

DATE INSTALLED on issuance of permit

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM ₁₀	Unclassifiable				
Sulfur Dioxide	Non-attainment				
Organic Compounds	Attainment	2.9 lb/hr	4.2	2.9 lb/hr, 40 lb/d	7.3
Nitrogen Oxides	Unclassifiable/Attainment				
Carbon Monoxide	Unclassifiable/Attainment				
Lead	Not Designated				
Other: Air Toxics					

APPLICABLE FEDERAL RULES:

NSPS? _____ NESHAP? _____ PSD? _____ OFFSET POLICY? _____

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?

limitations for this process were included by the NWDO in their recent PTI 03-08793 to be no control with styrene monomer content restrictions of 44% for clear gelcoats, 30% for all other gelcoats, 18% for pigmented resins and 33.5% for all other resins.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? yes
OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ _____

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? x YES _____ NO _____

IDENTIFY THE AIR CONTAMINANTS: styrene monomer

