State of Ohio Environmental Protection Agency

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
BROWN COUNTY
Application No: 07-477

DATE: September 22, 1999

Storm-Tek
Andrea L Eisenberger
1872 State Route 125
Hamersville, OH 45130

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
PORTSMOUTH CITY HEALTH DEPARTMENT

Permit To Install Terms and Conditions

Issue Date: September 22, 1999
Effective Date: September 22, 1999

FINAL PERMIT TO INSTALL 07-477

Application Number:	07-477
APS Premise Number:	0708000068
Permit Fee:	**$600**
Name of Facility:	Storm-Tek
Person to Contact:	Andrea L Eisenberger
Address:	1872 State Route 125 Hamersville, OH 45130

Location of proposed air contaminant source(s) [emissions unit(s)]:
1872 State Route 125
Hamersville, **Ohio**

Description of proposed emissions unit(s):
TWO FIBERGLASS SPRAY LAY-UP BOOTHS AND ONE GELCOAT SPRAY BOOTH.

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

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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 are inadequate 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 prove to be inadequate 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.

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

Pollutant	Tons Per Year
OC	14.3
Styrene	9.8

Facility ID: **0708000068**

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Emissions Unit ID: **K001**

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
gelcoat spray booth	OAC rule 3745-31-05	6.9 lbs/hr of styrene
		9.8 tpy of styrene as a rolling, 12-month summation for emission units K001, K002, and K003 combined
		14.7 tpy of organic compounds (OC), excluding cleanup as a summation for emission units K001, K002 and K003 combined
		3.0 lbs/hr of OC from cleanup as a summation for emission units K001, K002, and K003 combined
		3.6 tpy of OC from cleanup as a summation for emission units K001, K002, and K003 combined
	OAC rule 3745-21-07(G)(2)	8 lbs/hr of OC, excluding cleanup
		40 lbs/day of OC, excluding cleanup

2. Additional Terms and Conditions

2.a None.

B. Operational Restrictions

1. The permittee shall not employ photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5) as a cleanup material in this emissions unit.

   Prior to employing any cleanup material that is a photochemically reactive material, the permittee shall provide written notification to, and obtain approval from the Ohio EPA field office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in cleanup materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new cleanup material to be employed, the solvent composition of the cleanup material, and the maximum amount to be used, in pounds per hour.

2. The restricted annual resin and gelcoat usage for this emissions unit shall not exceed those established by the formulas listed in term and condition C.2 below, based upon a rolling 12-month summation.

   To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the production levels for emission units K001, K002, and K003 which correlate to emissions specified in the following table:

Month(s)	**Maximum Allowable Cumulative Styrene Emissions** (tons)
1	0.82
1-2	1.64
1-3	2.46
1-4	3.28
1-5	4.10
1-6	4.92
1-7	5.74
1-8	6.56
1-9	7.38
1-10	8.20
1-11	9.02
1-12	9.80

After the first 12 calendar months of operation, compliance with the operational restriction shall be based upon a rolling, 12-month summation of the styrene emissions.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for each cleanup material employed in this emissions unit:

   a. the company identification of each cleanup material containing organic compound(s) employed in this emissions unit;

   b. whether or not each cleanup material employed is a photochemically reactive material;

   c. the OC content of each cleanup material employed, in pounds/gallon; and,

   d. the number of gallons of each cleanup material employed.

2. The permittee shall track the monthly resin and gelcoat usage with the appropriate styrene emission factor, for the existing scenarios and those developed for any new production scenarios, to calculate the total monthly and rolling, 12-month styrene emissions for sources K001, K002 and K003 combined.

   Emission factors for new scenarios shall be calculated using the FRP Model (EPA600/C-98/002) based upon the following operating parameters: styrene content of the resin or gelcoat, flow coater application process, use of suppressant, distance from gun to mold, thickness of material sprayed, gel time, and air velocity over the mold. Emission factors for existing scenarios are listed below.

   The permittee shall maintain records of the FRP Model calculations for each production scenario in a permanent form available at an onsite location for review by the Director, or authorized representative of the Director.

	Production Scenario	**FRP Emission Factor** (% available styrene and OC)
#1	K002 and K003: resin with 45% styrene and 46% total OC	10.6%

#2	K002 and K003: resin with 45% styrene with suppressant, and 46% total OC	5.4%
#3	K001: gelcoat with 32% styrene and 37% total OC)	50.3%

Calculate the total monthly styrene emissions for emission units K001, K002, and K003 by summing (i), (ii) and (iii) below (plus monthly emissions from any new production scenarios) then add the current month's emissions to the emissions for the preceding eleven calendar months. The rolling, 12-month styrene emissions shall not exceed the allowable listed in section A.1 above.

i. Tons/month of styrene for production scenario #1:

Multiply the gallons of resin employed per month times the density of resin in pounds per gallon times 0.45 (45% styrene content) times 0.106 the (10.6% FRP emission factor) divided by 2000 pounds per ton;

ii. Tons/month of styrene for production scenario #2:

Multiply the gallons of resin employed per month times the density of resin in pounds per gallon times 0.45 (45% styrene content) times 0.054 the (5.4% FRP emission factor) divided by 2000 pounds per ton; and

iii. Tons/month of styrene for production scenario #3:

Multiply the gallons of gelcoat employed per month times the density of gelcoat in pounds per gallon times 0.32 (32% styrene content) times 0.502 the (50.2% FRP emission factor) divided by 2000 pounds per ton.

3. The permittee shall collect and record the following information for each day for each gelcoat employed in this emissions unit:

a. the company identification for each material employed;

b. the total number of gallons of each type of material employed;

c. the organic compound content of each material, in % OC;

d. the styrene content of each material, in % styrene;

e. the organic compound emissions, in pounds per day (see calculation methodology in section E.1.g);

f. the styrene emissions, in pounds per day (gal/day gelcoat usage x % styrene x FRP factor x lb/gal gelcoat density);

g. the total number of hours the emissions unit was in operation;

h. the average hourly organic compound emission rate, i.e., (e)/(g), in pounds per hour (average); and,

i. the average hourly styrene emission rate, i.e., (f)/(g), in pounds per hour (average).

4. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:

a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and,

b. 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 include the following information:

   a. an identification of each day during which the average hourly organic compound emissions from the gelcoat exceeded the 7.0 pound per hour, and the actual average hourly organic compound emissions for each such day;

   b. an identification of each day during which the daily organic compound emissions from the gelcoat exceeded the 31.2 pound per day, and the actual organic compound emissions for each such day; and,

   c. an identification of each day during which the average hourly styrene emissions from the gelcoat exceeded the 6.1 pound per hour, and the actual average hourly organic compound emissions for each such day.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month styrene emission limitation for emissions units K001, K002, and K003 combined and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative styrene emissions.

3. The deviation (excursion) reports shall be submitted in accordance with Part 1 - General Terms and Conditions of this permit under section (A)(1).

4. The permittee shall submit deviation reports which identify the days during which any cleanup materials, that are photochemically reactive materials, were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive cleanup material(s), and the estimated total quantity of material(s) emitted during each such day in pounds. Each report shall be submitted to the Director (appropriate Ohio EPA District Office or local air agency) within 30 days of the deviation.

E. Testing Requirements

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

   a. Emission Limitation

      6.1 lbs/hr of styrene

      Applicable Compliance Method

      Compliance shall be demonstrated by calculating the sum of (i) and the emissions from any new production scenarios:

      i. Average pounds/hour of styrene for emission unit K001 using production scenario #3 =

         Multiply the amount of gelcoat employed in gallons/day times the density of gelcoat in pounds/gallon times 0.32 (32% styrene content) times 0.503 the (50.3% FRP emission factor) divided by the hours/day of operation.

   b. Emission Limitation

      9.8 tpy as a rolling 12-month summation for emission units K001, K002 and K003 combined

      Applicable Compliance Method:

      Compliance shall be demonstrated by calculating the sum of (i), (ii) and (iii) below (plus monthly emissions from any new production scenarios) and adding the current month's emissions to the emissions for the preceding eleven calendar months for K001, K002 and K003 combined.

      i. Tons/rolling, 12-months of styrene for production scenario #1:

         Multiply the amount of resin employed in gallons/month times the density of resin in pounds/gallon times 0.45 (45% styrene content) times 0.106 the (10.6% FRP emission factor) divided by 2000 pounds/ton plus the emissions from the preceding eleven calendar months;

      ii. Tons/rolling, 12-months of styrene for production scenario #2:

Multiply the amount of resin employed in gallons/month times the density of resin in pounds/gallon times 0.45 (45% styrene content) times 0.054 the (5.4% FRP emission factor) divided by 2000 pounds/ton plus the emissions from the preceding eleven calendar months; and

iii. Tons/month of styrene for production scenario #3:

Multiply the gallons of gelcoat employed per month times the density of gelcoat in pounds per gallon times 0.32 (32% styrene content) times 0.502 the (50.2% FRP emission factor) divided by 2000 pounds per ton plus the emissions from the preceding eleven calendar months.

c. Emission Limitation

3.9 tpy of OC, excluding cleanup

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and the annual emissions from any new production scenarios:

i. Tons/year of OC for production scenario #3:

Multiply the amount of gelcoat employed in gallons/month times the density of gelcoat in pounds/gallon times 0.37 (37% OC content) times 0.503 the (50.3% FRP emission factor) divided by 2000 pounds/ton.

d. Emission Limitation

1.2 tpy of OC from cleanup

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the annual usage rate of cleanup materials in pounds/year times the OC content of the cleanup material (100% for Acetone) divided by 2000 pounds/ton.

e. Emission Limitation

8 lbs/hr of OC, excluding cleanup

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and the emissions from any new production scenarios:

i. Average pounds/hour of OC for production scenario #3:

Multiply the amount of gelcoat employed in gallons/day times the density of gelcoat in pounds/gallon times 0.37 (37% OC content) times 0.503 (50.3% FRP emission factor) divided by the hours/day of operation.

f. Emission Limitation

40 lbs/day of OC, excluding cleanup

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and the emissions from any new production scenarios:

i. Pounds/day of OC for production scenario #3:

Multiply the amount of gelcoat employed in gallons/day times the density of gelcoat in pounds/gallon times 0.37 (37% OC content) times 0.503 (50.3% FRP emission factor).

2. Formulation data or U. S. EPA Method 24 shall be used to determine the organic compound contents of the materials employed in this emissions unit.

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of OAC rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxics Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxics Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Styrene

TLV (Ug/m3): 85,000

Maximum Hourly Emission Rate (lbs/hr): 17

Predicted 1-Hour Maximum Ground-Level Concentration (Ug/m3): 7,585

MAGLC (Ug/m3): 2,024

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a

"modification":

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 specified in the above table;

b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate {not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit}, reduced exhaust gas flow rate, and decreased stack height);

c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and

d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determined that the changed emissions unit still satisfies the Air Toxics Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

Facility ID: **0708000068**

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Emissions Unit ID: **K002**

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

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
fiberglass spray lay-up booth #1	OAC rule 3745-31-05	6.9 lbs/hr of styrene
		9.8 tpy of styrene as a rolling, 12-month summation for emission units K001, K002, and K003 combined
		14.7 tpy of organic compounds (OC), excluding cleanup as a summation for emission units K001, K002 and K003 combined
		3.0 lbs/hr of OC from cleanup as a summation for emission units K001, K002, and K003 combined
		3.6 tpy of OC from cleanup as a summation for emission units K001, K002, and K003 combined
	OAC rule 3745-21-07(G)(2)	8 lbs/hr of OC, excluding cleanup
		40 lbs/day of OC, excluding cleanup

2. Additional Terms and Conditions

2.a None.

B. Operational Restrictions

1. The permittee shall not employ photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5) as a cleanup material in this emissions unit.

   Prior to employing any cleanup material that is a photochemically reactive material, the permittee shall provide written notification to, and obtain approval from the Ohio EPA field office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in cleanup materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new cleanup material to be employed, the solvent composition of the cleanup material, and the maximum amount to be used, in pounds per hour.

2. The restricted annual resin and gelcoat usage for this emissions unit shall not exceed those established by the formulas listed in term and condition C.2 below, based upon a rolling 12-month summation.

   To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the production levels for emission units K001, K002, and K003 which correlate to emissions specified in the following table:

Month(s)	**Maximum Allowable Cumulative Styrene Emissions** (tons)
1	0.82
1-2	1.64
1-3	2.46
1-4	3.28
1-5	4.10
1-6	4.92
1-7	5.74
1-8	6.56
1-9	7.38
1-10	8.20
1-11	9.02
1-12	9.80

After the first 12 calendar months of operation, compliance with the operational restriction shall be based upon a rolling, 12-month summation of the styrene emissions.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for each cleanup material employed in this emissions unit:

   a. the company identification of each cleanup material containing organic compound(s) employed in this emissions unit;

   b. whether or not each cleanup material employed is a photochemically reactive material;

   c. the OC content of each cleanup material employed, in pounds/gallon; and,

   d. the number of gallons of each cleanup material employed.

2. The permittee shall track the monthly resin and gelcoat usage with the appropriate styrene emission factor, for the existing scenarios and those developed for any new production scenarios, to calculate the total monthly and rolling, 12-month styrene emissions for sources K001, K002 and K003 combined.

   Emission factors for new scenarios shall be calculated using the FRP Model (EPA600/C-98/002) based upon the following operating parameters: styrene content of the resin or gelcoat, flow coater application process, use of suppressant, distance from gun to mold, thickness of material sprayed, gel time, and air velocity over the mold. Emission factors for existing scenarios are listed below.

   The permittee shall maintain records of the FRP Model calculations for each production scenario in a permanent form available at an onsite location for review by the Director, or authorized representative of the Director.

	Production Scenario	**FRP Emission Factor** (% available styrene and OC)
#1	K002 and K003: resin with 45% styrene and 46% total OC	10.6%
#2	K002 and K003: resin with 45% styrene with suppressant, and 46% total OC	5.4%

#3	K001: gelcoat with 32% styrene and 37% total OC)	50.3%

Calculate the total monthly styrene emissions for emission units K001, K002, and K003 by summing (i), (ii) and (iii) below (plus monthly emissions from any new production scenarios) then add the current month's emissions to the emissions for the preceding eleven calendar months. The rolling, 12-month styrene emissions shall not exceed the allowable listed in section A.1 above.

i. Tons/month of styrene for production scenario #1:

Multiply the gallons of resin employed per month times the density of resin in pounds per gallon times 0.45 (45% styrene content) times 0.106 the (10.6% FRP emission factor) divided by 2000 pounds per ton;

ii. Tons/month of styrene for production scenario #2:

Multiply the gallons of resin employed per month times the density of resin in pounds per gallon times 0.45 (45% styrene content) times 0.054 the (5.4% FRP emission factor) divided by 2000 pounds per ton; and

iii. Tons/month of styrene for production scenario #3:

Multiply the gallons of gelcoat employed per month times the density of gelcoat in pounds per gallon times 0.32 (32% styrene content) times 0.502 the (50.2% FRP emission factor) divided by 2000 pounds per ton.

3. The permittee shall collect and record the following information for each day for each resin and catalyst employed in this emissions unit:

a. the company identification for each material employed;

b. the total number of gallons of each type of material employed;

c. the organic compound content of each material, in % OC;

d. the styrene content of each material, in % styrene;

e. the organic compound emissions, in pounds per day (see calculation methodology in section E.1.g);

f. the styrene emissions, in pounds per day (gal/day resin usage x % styrene x FRP factor x lb/gal resin density);

g. the total number of hours the emissions unit was in operation;

h. the average hourly organic compound emission rate, i.e., (e)/(g), in pounds per hour (average); and,

i. the average hourly styrene emission rate, i.e., (f)/(g), in pounds per hour (average).

4. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:

a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and,

b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

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Emissions Unit ID: **K002**

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

   a. an identification of each day during which the average hourly organic compound emissions from the resin and catalyst exceeded the 6.9 pound per hour, and the actual average hourly organic compound emissions for each such day;

   b. an identification of each day during which the daily organic compound emissions from the resin and catalyst exceeded the 32.8 pound per day, and the actual organic compound emissions for each such day; and

   c. an identification of each day during which the average hourly styrene emissions from the resin exceeded the 5.8 pound per hour, and the actual average hourly organic compound emissions for each such day.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month styrene emission limitation for emissions units K001, K002 and K003 combined and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative styrene emissions.

3. The deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

4. The permittee shall submit deviation reports which identify the days during which any cleanup materials, that are photochemically reactive materials, were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive cleanup material(s), and the estimated total quantity of material(s) emitted during each such day in pounds. Each report shall be submitted to the Director (appropriate Ohio EPA District Office or local air agency) within 30 days of the deviation.

E. Testing Requirements

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

   a. Emission Limitation

      5.8 lbs/hr of styrene

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Emissions Unit ID: **K002**

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and (ii) plus the emissions from any new production scenarios:

i. Average pounds/hour of styrene for emission unit K002 using production scenario #1:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.45 (45% styrene content) times 0.106 the (10.6% FRP emission factor) divided by the hours/day of operation; and

ii. Average pounds/hour of styrene for emission unit K002 using production scenario #2:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.45 (45% styrene content) times 0.054 the (5.4% FRP emission factor) divided by the hours/day of operation.

b. Emission Limitation

9.8 tpy as a rolling 12-month summation for emission units K001, K002 and K003 combined

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of (i), (ii) and (iii) below (plus monthly emissions from any new production scenarios) and adding the current month's emissions to the emissions for the preceding eleven calendar months for K001, K002 and K003 combined.

i. Tons/rolling, 12-months of styrene for production scenario #1:

Multiply the amount of resin employed in gallons/month times the density of resin in pounds/gallon times 0.45 (45% styrene content) times 0.106 the (10.6% FRP emission factor) divided by 2000 pounds/ton plus the emissions from the preceding eleven calendar months;

ii. Tons/rolling, 12-months of styrene for production scenario #2:

Multiply the amount of resin employed in gallons/month times the density of resin in pounds/gallon times 0.45 (45% styrene content) times 0.054 the (5.4% FRP emission factor) divided by 2000 pounds/ton plus the emissions from the preceding eleven calendar months.; and

iii. Tons/month of styrene for production scenario #3:

Multiply the gallons of gelcoat employed per month times the density of gelcoat in pounds per gallon times 0.32 (32% styrene content) times 0.502 the (50.2% FRP emission factor) divided by 2000 pounds per ton plus the emissions from the preceding eleven calendar months.

c. Emission Limitation

3.4 tpy of OC, excluding cleanup

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and (ii) below (plus annual emissions from any new production scenarios) then calculating the sum of the total monthly OC emissions for the calendar year

i. Tons/year of OC for production scenario #1:

Multiply the amount of resin employed in gallons/month times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.106 the (10.6% FRP emission factor) divided by 2000 pounds/ton; and

ii. Tons/year of OC for production scenario #2:

Multiply the amount of resin employed in gallons/month times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.054 the (5.4% FRP emission factor) divided by 2000 pounds/ton.

d. Emission Limitation

1.2 tpy of OC from cleanup

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the annual usage rate of cleanup materials in pounds/year times the OC content of the cleanup material (100% for Acetone) divided by 2000 pounds/ton.

e. Emission Limitation

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8 lbs/hr of OC, excluding cleanup

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and (ii) plus the emissions from any new production scenarios:

i. Average pounds/hour of OC for production scenario #1:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.106 (10.6% FRP emission factor) divided by the hours/day of operation; and

ii. Average pounds/hour of OC for production scenario #2:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.054 the (5.4% FRP emission factor) divided by the hours/day of operation.

f. Emission Limitation

40 lbs/day of OC, excluding cleanup

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and (ii) plus the emissions from any new production scenarios:

i. Pounds/day of OC for production scenario #1:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.106 (10.6% FRP emission factor); and

ii. Pounds/day of styrene for production scenario #2:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.054 the (5.4% FRP emission factor).

2. Formulation data or U. S. EPA Method 24 shall be used to determine the organic compound contents of the materials employed in this emissions unit.

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of OAC rule 3745-31-05 and to ensure compliance with OAC rule

3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxics Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxics Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Styrene

TLV (Ug/m3): 85,000

Maximum Hourly Emission Rate (lbs/hr): 17

Predicted 1-Hour Maximum Ground-Level Concentration (Ug/m3): 7,585

MAGLC (Ug/m3): 2,024

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

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 specified in the above table;

b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate {not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit}, reduced exhaust gas flow rate, and decreased stack height);

c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,

d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a

permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determined that the changed emissions unit still satisfies the Air Toxics Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

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Emissions Unit ID: **K003**

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

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
fiberglass spray lay-up booth #2	OAC rule 3745-31-05	6.9 lbs/hr of styrene 9.8 tpy of styrene as a rolling, 12-month summation for emission units K001, K002, and K003 combined 14.7 tpy of organic compounds (OC), excluding cleanup as a summation for emission units K001, K002 and K003 combined 3.0 lbs/hr of OC from cleanup as a summation for emission units K001, K002, and K003 combined 3.6 tpy of OC from cleanup as a summation for emission units K001, K002, and K003 combined
	OAC rule 3745-21-07(G)(2)	8 lbs/hr of OC, excluding cleanup 40 lbs/day of OC, excluding cleanup

2. Additional Terms and Conditions

2.a None.

B. Operational Restrictions

1. The permittee shall not employ photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5) as a cleanup material in this emissions unit.

   Prior to employing any cleanup material that is a photochemically reactive material, the permittee shall provide written notification to, and obtain approval from the Ohio EPA field office. Such notification shall include information sufficient to determine that the emissions associated with the proposed change in cleanup materials will comply with the emission limits and/or control requirements as defined in OAC rule 3745-21-07(G)(2). This notification, at a minimum, shall include the company identification of the new cleanup material to be employed, the solvent composition of the cleanup material, and the maximum amount to be used, in pounds per hour.

2. The restricted annual resin and gelcoat usage for this emissions unit shall not exceed those established by the formulas listed in term and condition C.2 below, based upon a rolling 12-month summation.

   To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the production levels for emission units K001, K002, and K003 which correlate to emissions specified in the following table:

Month(s)	**Maximum Allowable Cumulative Styrene Emissions** (tons)

1	0.82
1-2	1.64
1-3	2.46
1-4	3.28
1-5	4.10
1-6	4.92
1-7	5.74
1-8	6.56
1-9	7.38
1-10	8.20
1-11	9.02
1-12	9.80

After the first 12 calendar months of operation, compliance with the operational restriction shall be based upon a rolling, 12-month summation of the styrene emissions.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for each cleanup material employed in this emissions unit:

   a. the company identification of each cleanup material containing organic compound(s) employed in this emissions unit;

   b. whether or not each cleanup material employed is a photochemically reactive material;

   c. the OC content of each cleanup material employed, in pounds/gallon; and,

   d. the number of gallons of each cleanup material employed.

2. The permittee shall track the monthly resin and gelcoat usage with the appropriate styrene emission factor, for the existing scenarios and those developed for any new production scenarios, to calculate the total monthly and rolling, 12-month styrene emissions for sources K001, K002 and K003 combined.

   Emission factors for new scenarios shall be calculated using the FRP Model (EPA600/C-98/002) based upon the following operating parameters: styrene content of the resin or gelcoat, flow coater application process, use of suppressant, distance from gun to mold, thickness of material sprayed, gel time, and air velocity over the mold.

Emission factors for existing scenarios are listed below.

The permittee shall maintain records of the FRP Model calculations for each production scenario in a permanent form available at an onsite location for review by the Director, or authorized representative of the Director.

	Production Scenario	**FRP Emission Factor** (% available styrene and OC)
#1	K002 and K003: resin with 45% styrene and 46% total OC	10.6%
#2	K002 and K003: resin with 45% styrene with suppressant, and 46% total OC	5.4%
#3	K001: gelcoat with 32% styrene and 37% total OC)	50.3%

Calculate the total monthly styrene emissions for emission units K001, K002, and K003 by summing (i), (ii) and (iii) below (plus monthly emissions from any new production scenarios) then add the current month's emissions to the emissions for the preceding eleven calendar months. The rolling, 12-month styrene emissions shall not exceed the allowable listed in section A.1 above.

i. Tons/month of styrene for production scenario #1:

Multiply the gallons of resin employed per month times the density of resin in pounds per gallon times 0.45 (45% styrene content) times 0.106 the (10.6% FRP emission factor) divided by 2000 pounds per ton;

ii. Tons/month of styrene for production scenario #2:

Multiply the gallons of resin employed per month times the density of resin in pounds per gallon times 0.45 (45% styrene content) times 0.054 the (5.4% FRP emission factor) divided by 2000 pounds per ton; and

iii. Tons/month of styrene for production scenario #3:

Multiply the gallons of gelcoat employed per month times the density of gelcoat in pounds per gallon times 0.32 (32% styrene content) times 0.502 the (50.2% FRP emission factor) divided by 2000 pounds per ton.

3. The permittee shall collect and record the following information for each day for each

resin and catalyst employed in this emissions unit:

a. the company identification for each material employed;

b. the total number of gallons of each type of material employed;

c. the organic compound content of each material, in % OC;

d. the styrene content of each material, in % styrene;

e. the organic compound emissions, in pounds per day (see calculation methodology in section E.1.g);

f. the styrene emissions, in pounds per day (gal/day resin usage x % styrene x FRP factor x lb/gal resin density);

g. the total number of hours the emissions unit was in operation;

h. the average hourly organic compound emission rate, i.e., (e)/(g), in pounds per hour (average); and,

i. the average hourly styrene emission rate, i.e., (f)/(g), in pounds per hour (average).

4. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:

a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and

b. 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 include the following information:

   a. An identification of each day during which the average hourly organic compound emissions from the resin and catalyst exceeded the 6.9 pound per hour, and the actual average hourly organic compound emissions for each such day;

   b. An identification of each day during which the daily organic compound emissions from the resin and catalyst exceeded the 32.8 pound per day, and the actual organic compound emissions for each such day; and

   c. An identification of each day during which the average hourly styrene emissions from the resin exceeded the 5.8 pound per hour, and the actual average hourly organic compound emissions for each such day.

2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month styrene emission limitation for emissions units K001, K002, and K003 combined and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative styrene emissions.

3. The deviation (excursion) reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

4. The permittee shall submit deviation reports which identify the days during which any cleanup materials, that are photochemically reactive materials, were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive cleanup material(s), and the estimated total quantity of material(s) emitted during each such day in pounds. Each report shall be submitted to the Director (appropriate Ohio EPA District Office or local air agency) within 30 days of the deviation.

E. Testing Requirements

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

   a. Emission Limitation

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5.8 lbs/hr of styrene

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and (ii) plus the emissions from any new production scenarios:

i. Average pounds/hour of styrene for emission unit K002 using production scenario #1:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.45 (45% styrene content) times 0.106 the (10.6% FRP emission factor) divided by the hours/day of operation; and

ii. Average pounds/hour of styrene for emission unit K002 using production scenario #2:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.45 (45% styrene content) times 0.054 the (5.4% FRP emission factor) divided by the hours/day of operation.

b. Emission Limitation

9.8 tpy as a rolling 12-month summation for emission units K001, K002 and K003 combined

Applicable Compliance Method:

Compliance shall be demonstrated by calculating the sum of (i), (ii) and (iii) below (plus monthly emissions from any new production scenarios) and adding the current month's emissions to the emissions for the preceding eleven calendar months for K001, K002 and K003 combined.

i. Tons/rolling, 12-months of styrene for production scenario #1:

Multiply the amount of resin employed in gallons/month times the density of resin in pounds/gallon times 0.45 (45% styrene content) times 0.106 the (10.6% FRP emission factor) divided by 2000 pounds/ton plus the emissions for the preceding eleven calendar months;

ii. Tons/rolling, 12-months of styrene for production scenario #2:

Multiply the amount of resin employed in gallons/month times the density of resin in pounds/gallon times 0.45 (45% styrene content) times 0.054 the (5.4% FRP emission factor) divided by 2000 pounds/ton plus the emissions for the preceding eleven calendar months; and

iii. Tons/month of styrene for production scenario #3:

Multiply the gallons of gelcoat employed per month times the density of gelcoat in pounds per gallon times 0.32 (32% styrene content) times 0.502 the (50.2% FRP emission factor) divided by 2000 pounds per ton plus the emissions for the preceding eleven calendar months.

c. Emission Limitation

3.4 tpy of OC, excluding cleanup

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and (ii) below (plus annual emissions from any new production scenarios) then calculating the sum of the total monthly OC emissions for the calendar year

i. Tons/year of OC for production scenario #1:

Multiply the amount of resin employed in gallons/month times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.106 the (10.6% FRP emission factor) divided by 2000 pounds/ton; and

ii. Tons/year of OC for production scenario #2:

Multiply the amount of resin employed in gallons/month times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.054 the (5.4% FRP emission factor) divided by 2000 pounds/ton.

d. Emission Limitation

1.2 tpy of OC from cleanup

Applicable Compliance Method

Compliance shall be demonstrated by multiplying the annual usage rate of cleanup materials in pounds/year times the OC content of the cleanup material (100% for Acetone) divided by 2000 pounds/ton.

e. Emission Limitation

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Emissions Unit ID: **K003**

8 lbs/hr of OC, excluding cleanup

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and (ii) plus the emissions from any new production scenarios:

i. Average pounds/hour of OC for production scenario #1:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.106 (10.6% FRP emission factor) divided by the hours/day of operation; and

ii. Average pounds/hour of styrene for production scenario #2:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.054 the (5.4% FRP emission factor) divided by the hours/day of operation.

f. Emission Limitation

40 lbs/day of OC, excluding cleanup

Applicable Compliance Method

Compliance shall be demonstrated by calculating the sum of (i) and (ii) plus the emissions from any new production scenarios:

i. Pounds/day of OC for production scenario #1:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.106 (10.6% FRP emission factor); and

ii. Pounds/day of styrene for production scenario #2:

Multiply the amount of resin employed in gallons/day times the density of resin in pounds/gallon times 0.46 (46% OC content) times 0.054 the (5.4% FRP emission factor).

2. Formulation data or U. S. EPA Method 24 shall be used to determine the organic

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compound contents of the materials employed in this emissions unit.

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Emissions Unit ID: **K003**

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of OAC rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxics Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxics Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

   Pollutant: Styrene

   TLV (Ug/m3): 85,000

   Maximum Hourly Emission Rate (lbs/hr): 17

   Predicted 1-Hour Maximum Ground-Level Concentration (Ug/m3): 7,585

   MAGLC (Ug/m3): 2,024

   OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

   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 specified in the above table;

   b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate {not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit}, reduced exhaust gas flow rate, and decreased stack height);

   c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and

d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determined that the changed emissions unit still satisfies the Air Toxics Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.