



State of Ohio Environmental Protection Agency

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

**CERTIFIED MAIL**

Street Address:

50 West Town Street, Suite 700

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

Mailing Address:

Lazarus Gov. Center  
P.O. Box 1049

**Application No: 14-05915**

**Fac ID: 1409030581**

**DATE: 5/3/2007**

RL Industries, Inc  
Brian Linnemann  
9355 LeSaint Drive  
Fairfield, OH 45014

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

Sincerely,

Michael W. Ahern, Manager  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

CC: USEPA

HCDES



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install**

**Issue Date: 5/3/2007**

**FINAL PERMIT TO INSTALL 14-05915**

Application Number: 14-05915  
Facility ID: 1409030581  
Permit Fee: **\$2700**  
Name of Facility: RL Industries, Inc  
Person to Contact: Brian Linnemann  
Address: 9355 LeSaint Drive  
Fairfield, OH 45014

Location of proposed air contaminant source(s) [emissions unit(s)]:

**9355 LeSaint Drive  
Fairfield, Ohio**

Description of proposed emissions unit(s):

**Modification of PTI 14-4261 with updated emissions factors and installation of a resin mixer and plantwide cleanup.**

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



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Chris Korleski  
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

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 (i.e., postmarked) quarterly 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

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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)**

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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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

#### **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.

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**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 ninety (90) 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

<u>Pollutant</u>	<u>Tons Per Year</u>
HAPs	9.9 for a single HAP 24.9 for total HAP
Organic Compounds	98.58

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PE/PM10  
VOC

0.44  
75.28

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**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 - (P001) - Filament Winding Equipment with Resin Bath**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 7.3 tons per year.  The requirements of this rule include compliance with OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).  See term and condition B.1.
OAC rule 3745-31-05(C) Synthetic minor to avoid 40 CFR Part 63 Subpart WWWW and Title V permitting	See term and condition A.2.b.  For purposes of federal major stationary source applicability determinations, all annual organic compound emissions are considered volatile organic compound emissions.
OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.
ORC 3704.03 (T)(4)	See term and condition A.2.c.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations, except for volatile organic compound emissions as stated in term A.2.c.
- 2.b The total allowable emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units P001 (Filament Winding Equipment with Resin Bath), P002 (Spray Resin Layup on Dry Filament Winding), P003 (Spray Resin Layup on Taped Filament Winding), P006 (Gelcoat application), P007 (Vacuum Assisted Resin Transfer Molding 1),

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P008 (Assembly and Manual Resin Application), P009 (Vacuum Assisted Resin Transfer Molding 2), P010 (Cowles Resin Mixer), P011 (Plant-wide Cleanup), all de minimus emissions units (as defined in OAC rule 3745-15-05), all emissions units exempt from the requirement to obtain a permit to install pursuant to OAC rule 3745-31-03 currently, and future to-be-installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP, as a rolling, 365-day summation, and 24.9 TPY for any combination of HAPs, as a rolling, 365-day summation.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- 2.c** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compound (VOC) emissions from this air contaminant source because the calculated annual emission rate for VOC is less than ten tons per year, taking into account the federally enforceable rule emission limitation of 40 pounds per day of organic compounds under OAC rule 3745-21-07(G)(2).

**B. Operational Restrictions**

1. The permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating (resin or gel coat) employed;
  - b. the amount of each coating (resin or gel coat) employed, in pounds;
  - c. the organic compound content, recorded in percent weight, of each coating (resin or gel coat); and
  - d. the total organic compound emission rate from all coatings (resin and gel coat), in pounds per day [ the summation of (b x c) x (emission factor found in the Composite Fabricators Association Unified Emission Factors for Open Molding of Composites) for all resins and gel coats employed during the day].

Emissions Unit ID: P001

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

- e. the total number of hours the emission unit was in operation; and
  - f. the average hourly organic compound emission rate for all coatings, i.e., (d)/(e), in pounds per hour.
2. The permittee shall summarize the emissions from the records maintained in term C.1 on a monthly basis and shall total the emissions at the end of the calendar year.
  3. The permittee shall collect and record the following information for each day for the emissions units identified in term and condition A.2.b:
    - a. the company identification for each coating (resin and gel coat) employed;
    - b. the amount of each coating (resin and gel coat) employed, in pounds;
    - c. the HAP content, recorded in percent weight, of each coating (resin and gel coat);
    - d. the total individual HAP emissions for each HAP from all liquid organic materials employed, in pounds per day [for each HAP the product of (b) times (c) times the Composite Fabricators Unified Emission Factors for Open Molding of Composites for each liquid organic material];
    - e. the updated rolling, 365-day summation for each individual HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day;
    - f. the total combined HAP emissions from all liquid organic materials employed, in pounds per day; and
    - g. the updated rolling, 365-day summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact.

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4. The permit to install for these emissions units P001, P002, P003, P006 thru P011 were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application and the supplemental information after submittal of the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 85.2

Maximum Hourly Emission Rate (lbs/hr): 44.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1500

MAGLC (ug/m3): 2024

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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.,

Emissions Unit ID: P001

increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

#### D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that contain the following information:
  - a. An identification of each day during which the average hourly OC emissions from the coating materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day; and
  - b. An identification of each day during which the OC emissions from the coating materials exceeded 40 pounds per day, and the actual OC emissions for each such day.

The reports shall identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance.

2. All deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations outlined in term and condition A.2.b. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively.)
4. The permittee shall submit an annual report to the Hamilton County Department of Environmental Services which specifies the total organic compound emissions from this emissions unit. This report shall be submitted by January 31 of each year and cover the previous calendar year.

#### E. Testing Requirements

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1. Compliance with the emission limitations specified in Section A.1 shall be determined by the following methods:

Emission Limitations:

8 lbs/hr and 40 lbs/day of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in term and condition C.1.

Emission Limitation:

7.3 TPY of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitation shall be determined by the record keeping requirements specified in terms and conditions C.1 and C.2.

2. Formulation data or U.S. EPA method 24 (for coatings) shall be used to determine the OC contents of the materials employed in this emissions unit.
3. Compliance with the HAP emission limitations specified in term and condition A.2.b shall be determined by the required record keeping in term and condition C.3.

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**F. Miscellaneous Requirements**

1. The terms and conditions of this Permit To Install supercede the terms and conditions of air permit to install number 14-04261 issued May 14, 1997.
2. The following terms and conditions of this permit are federally enforceable: A, B, C.1 - C.3, D and E.

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**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 - (P002) - Spray Resin Layup on Dry Filament Winding**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 7.3 tons per year.  The requirements of this rule include compliance with OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).  See term and condition B.1.
OAC rule 3745-31-05(C) Synthetic minor to avoid 40 CFR Part 63 Subpart WWWW and Title V permitting	See term and condition A.2.b.  For purposes of federal major stationary source applicability determinations, all annual organic compound emissions are considered volatile organic compound emissions.
OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.
ORC 3704.03 (T)(4)	See term and condition A.2.c.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emissions limitations, except for volatile organic compound emissions as stated in term A.2.c.
- 2.b The total allowable emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units P001 (Filament Winding Equipment with Resin Bath), P002 (Spray Resin Layup on Dry Filament Winding), P003 (Spray Resin Layup on Taped Filament Winding), P006 (Gelcoat application), P007 (Vacuum Assisted Resin Transfer Molding 1),

Emissions Unit ID: **P002**

P008 (Assembly and Manual Resin Application), P009 (Vacuum Assisted Resin Transfer Molding 2), P010 (Cowles Resin Mixer), P011 (Plant-wide Cleanup), all de minimus emissions units (as defined in OAC rule 3745-15-05), all emissions units exempt from the requirement to obtain a permit to install pursuant to OAC rule 3745-31-03 currently, and future to-be-installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP, as a rolling, 365-day summation, and 24.9 TPY for any combination of HAPs, as a rolling, 365-day summation.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- 2.c** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compound (VOC) emissions from this air contaminant source because the calculated annual emission rate for VOC is less than ten tons per year, taking into account the federally enforceable rule emission limitation of 40 pounds per day of organic compounds under OAC rule 3745-21-07(G)(2).

## **B. Operational Restrictions**

1. The permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating (resin or gel coat) employed;
  - b. the amount of each coating (resin or gel coat) employed, in pounds;
  - c. the organic compound content, recorded in percent weight, of each coating (resin or gel coat); and
  - d. the total organic compound emission rate from all coatings (resin and gel coat), in pounds per day [ the summation of (b x c) x (emission factor found in the Composite Fabricators Association Unified Emission Factors for Open Molding of Composites) for all resins and gel coats employed during the day].

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

- e. the total number of hours the emission unit was in operation; and
  - f. the average hourly organic compound emission rate for all coatings, i.e., (d)/(e), in pounds per hour.
2. The permittee shall summarize the emissions from the records maintained in term C.1 on a monthly basis and shall total the emissions at the end of the calendar year.
  3. The permittee shall collect and record the following information for each day for the emissions units identified in term and condition A.2.b:
    - a. the company identification for each coating (resin and gel coat) employed;
    - b. the amount of each coating (resin and gel coat) employed, in pounds;
    - c. the HAP content, recorded in percent weight, of each coating (resin and gel coat);
    - d. the total individual HAP emissions for each HAP from all liquid organic materials employed, in pounds or tons per day [for each HAP the product of (b) times (c) times the Composite Fabricators Unified Emission Factors for Open Molding of Composites for each liquid organic material];
    - e. the updated rolling, 365-day summation for each individual HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day;
    - f. the total combined HAP emissions from all liquid organic materials employed, in pounds per day; and
    - g. the updated rolling, 365-day summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be

Emissions Unit ID: P002

obtained by contacting your Ohio EPA field office or local air agency contact.

4. The permit to install for these emissions units P001, P002, P003, P006 thru P011 were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application and supplemental information after submittal of the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 85.2

Maximum Hourly Emission Rate (lbs/hr): 44.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1500

MAGLC (ug/m3): 2024

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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.,

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increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that contain the following information:
  - a. An identification of each day during which the average hourly OC emissions from the coating materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day; and
  - b. An identification of each day during which the OC emissions from the coating materials exceeded 40 pounds per day, and the actual OC emissions for each such day.

The reports shall identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance.

2. All deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations outlined in term and condition A.2.b. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively.)
4. The permittee shall submit an annual report to the Hamilton County Department of Environmental Services which specifies the total organic compound emissions from this emissions unit. This report shall be submitted by January 31 of each year and cover the previous calendar year.

#### **E. Testing Requirements**

Emissions Unit ID: P002

1. Compliance with the emission limitations specified in Section A.1 shall be determined by the following methods:

Emission Limitations:

8 lbs/hr and 40 lbs/day of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in term and condition C.1.

Emission Limitations:

7.3 TPY of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitation shall be determined by the record keeping requirements specified in terms and conditions C.1 and C.2.

2. Formulation data or U.S. EPA method 24 (for coatings) shall be used to determine the OC contents of the materials employed in this emissions unit.
3. Compliance with the HAP emission limitations specified in term and condition A.2.b shall be determined by the required record keeping in term and condition C.3.

**Issued: 5/3/2007**

**F. Miscellaneous Requirements**

1. The terms and conditions of this Permit To Install supercede the terms and conditions of air permit to install number 14-04261 issued May 14, 1997.
2. The following terms and conditions of this permit are federally enforceable: A, B, C.1 - C.3, D and E.

Issued: 5/3/2007

**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 - (P003) - Spray Resin Layup on Taped Filament Winding**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 7.3 tons per year.  The requirements of this rule include compliance with OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).  See term and condition B.1.
OAC rule 3745-31-05(C) Synthetic minor to avoid 40 CFR Part 63 Subpart WWWW and Title V permitting	See term and condition A.2.b.  For purposes of federal major stationary source applicability determinations, all annual organic compound emissions are considered volatile organic compound emissions.
OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.
ORC 3704.03 (T)(4)	See term and condition A.2.c.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emissions limitations, except for volatile organic compound emissions as stated in term A.2.c.
- 2.b The total emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units P001 (Filament Winding Equipment with Resin Bath), P002 (Spray Resin Layup on Dry Filament Winding), P003 (Spray Resin Layup on Taped Filament Winding), P006 (Gelcoat application), P007 (Vacuum Assisted Resin Transfer Molding 1), P008

Emissions Unit ID: **P003**

(Assembly and Manual Resin Application), P009 (Vacuum Assisted Resin Transfer Molding 2), P010 (Cowles Resin Mixer), P011 (Plant-wide Cleanup) all de minimus emissions units (as defined in OAC rule 3745-15-05), all emissions units exempt from the requirement to obtain a permit to install pursuant to OAC rule 3745-31-03 currently, and future to-be-installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP, as a rolling, 365-day summation, and 24.9 TPY for any combination of HAPs, as a rolling, 365-day summation.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- 2.c** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compound (VOC) emissions from this air contaminant source because the calculated annual emission rate for VOC is less than ten tons per year, taking into account the federally enforceable rule emission limitation of 40 pounds per day of organic compounds under OAC rule 3745-21-07(G)(2).

## **B. Operational Restrictions**

1. The permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating (resin or gel coat) employed;
  - b. the amount of each coating (resin or gel coat) employed, in pounds;
  - c. the organic compound content, recorded in percent weight, of each coating (resin or gel coat); and
  - d. the total organic compound emission rate from all coatings (resin and gel coat), in pounds per day [ the summation of (b x c) x (emission factor found in the Composite Fabricators Association Unified Emission Factors for Open Molding of Composites) for all resins and gel coats employed during the day].

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

- e. the total number of hours the emission unit was in operation; and
  - f. the average hourly organic compound emission rate for all coatings, i.e., (d)/(e), in pounds per hour.
2. The permittee shall summarize the emissions from the records maintained in term C.1 on a monthly basis and shall total the emissions at the end of the calendar year.
  3. The permittee shall collect and record the following information for each day for the emissions units identified in term and condition A.2.b:
    - a. the company identification for each coating (resin and gel coat) employed;
    - b. the amount of each coating (resin and gel coat) employed, in pounds;
    - c. the HAP content, recorded in percent weight, of each coating (resin and gel coat);
    - d. the total individual HAP emissions for each HAP from all liquid organic materials employed, in pounds or tons per day [for each HAP the product of (b) times (c) times the Composite Fabricators Unified Emission Factors for Open Molding of Composites for each liquid organic material];
    - e. the updated rolling, 365-day summation for each individual HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day;
    - f. the total combined HAP emissions from all liquid organic materials employed, in pounds per day; and
    - g. the updated rolling, 365-day summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be

Emissions Unit ID: P003

obtained by contacting your Ohio EPA field office or local air agency contact.

4. The permit to install for these emissions units P001, P002, P003, P006 thru P011 were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application and supplemental information after submittal of the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 85.2

Maximum Hourly Emission Rate (lbs/hr): 44.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1500

MAGLC (ug/m3): 2024

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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.,

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increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that contain the following information:
  - a. An identification of each day during which the average hourly OC emissions from the coating materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day; and
  - b. An identification of each day during which the OC emissions from the coating materials exceeded 40 pounds per day, and the actual OC emissions for each such day.

The reports shall identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance.

2. All deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations outlined in term and condition A.2.b. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively.)
4. The permittee shall submit an annual report to the Hamilton County Department of Environmental Services which specifies the total organic compound emissions from this emissions unit. This report shall be submitted by January 31 of each year and cover the previous calendar year.

#### **E. Testing Requirements**

Emissions Unit ID: P003

1. Compliance with the emission limitations specified in Section A.1 shall be determined by the following methods:

Emission Limitations:

8 lbs/hr and 40 lbs/day of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in term and condition C.1.

Emission Limitation:

7.3 TPY of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in terms and conditions C.1 and C.2.

2. Formulation data or U.S. EPA method 24 (for coatings) shall be used to determine the OC contents of the materials employed in this emissions unit.
3. Compliance with the HAP emission limitations specified in term and condition A.2.b shall be determined by the required record keeping in term and condition C.3.

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**F. Miscellaneous Requirements**

1. The terms and conditions of this air permit to install supercede the terms and conditions of air permit to install number 14-04261 issued May 14, 1997.
2. The following terms and conditions of this permit are federally enforceable: A, B, C.1 - C.3, D and E.

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**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 - (P006) - Gelcoat Application**

<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 7.3 tons per year.  The requirements of this rule include compliance with OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).  See term and condition B.1.
OAC rule 3745-31-05(C) Synthetic minor to avoid 40 CFR Part 63 Subpart WWWW and Title V permitting	See term and condition A.2.b.  For purposes of federal major stationary source applicability determinations, all annual organic compound emissions are considered volatile organic compound emissions.
OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.
ORC 3704.03 (T)(4)	See term and condition A.2.c.

**2. Additional Terms and Conditions**

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emissions limitations, except for volatile organic compound emissions as stated in term A.2.c.
- 2.b** The total allowable emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units P001 (Filament Winding Equipment with Resin Bath), P002 (Spray Resin Layup on Dry Filament Winding), P003 (Spray Resin Layup on Taped Filament Winding), P006 (Gelcoat application), P007 (Vacuum Assisted Resin Transfer Molding 1), P008 (Assembly and Manual Resin Application), P009 (Vacuum Assisted Resin

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Transfer Molding 2), P010 (Cowles Resin Mixer), P011 (Plant-wide Cleanup) all de minimus emissions units (as defined in OAC rule 3745-15-05), all emissions units exempt from the requirement to obtain a permit to install pursuant to OAC rule 3745-31-03 currently, and future to-be-installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP, as a rolling, 365-day summation, and 24.9 TPY for any combination of HAPs, as a rolling, 365-day summation.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- 2.c** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compound (VOC) emissions from this air contaminant source because the calculated annual emission rate for VOC is less than ten tons per year, taking into account the federally enforceable rule emission limitation of 40 pounds per day of organic compounds under OAC rule 3745-21-07(G)(2).

**B. Operational Restrictions**

1. The permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating (resin or gel coat) employed;
  - b. the amount of each coating (resin or gel coat) employed, in pounds;
  - c. the organic compound content, recorded in percent weight, of each coating (resin or gel coat); and
  - d. the total organic compound emission rate from all coatings (resin and gel coat), in pounds per day [ the summation of (b x c) x (emission factor found in the Composite Fabricators Association Unified Emission Factors for Open Molding of Composites) for all resins and gel coats employed during the day].

Emissions Unit ID: **P006**

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

- e. the total number of hours the emission unit was in operation; and
  - f. the average hourly organic compound emission rate for all coatings, i.e., (d)/(e), in pounds per hour.
2. The permittee shall summarize the emissions from the records maintained in term C.1 on a monthly basis and shall total the emissions at the end of the calendar year.
  3. The permittee shall collect and record the following information for each day for the emissions units identified in term and condition A.2.b:
    - a. the company identification for each coating (resin and gel coat) employed;
    - b. the amount of each coating (resin and gel coat) employed, in pounds;
    - c. the HAP content, recorded in percent weight, of each coating (resin and gel coat);
    - d. the total individual HAP emissions for each HAP from all liquid organic materials employed, in pounds or tons per day [for each HAP the product of (b) times (c), times the Composite Fabricators Unified Emission Factors for Open Molding of Composites for each liquid organic material];
    - e. the updated rolling, 365-day summation for each individual HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day;
    - f. the total combined HAP emissions from all liquid organic materials employed, in pounds per day; and
    - g. the updated rolling, 365-day summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact.

**Issued: 5/3/2007**

4. The permit to install for these emissions units P001, P002, P003, P006 thru P011 were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application and supplemental information after submittal of the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 85.2

Maximum Hourly Emission Rate (lbs/hr): 44.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1500

MAGLC (ug/m3): 2024

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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.,

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increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

#### D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that contain the following information:
  - a. An identification of each day during which the average hourly OC emissions from the coating materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day; and
  - b. An identification of each day during which the OC emissions from the coating materials exceeded 40 pounds per day, and the actual OC emissions for each such day.

The reports shall identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance.

2. All deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations outlined in term and condition A.2.b. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively.)
4. The permittee shall submit an annual report to the Hamilton County Department of Environmental Services which specifies the total organic compound emissions from this emissions unit. This report shall be submitted by January 31 of each year and cover the previous calendar year.

#### E. Testing Requirements

**Issued: 5/3/2007**

1. Compliance with the emission limitations specified in Section A.1 shall be determined by the following methods:

Emission Limitations:

8 lbs/hr and 40 lbs/day of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in term and condition C.1.

Emission Limitation:

7.3 TPY of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in terms and conditions C.1 and C.2.

2. Formulation data or U.S. EPA method 24 (for coatings) shall be used to determine the OC contents of the materials employed in this emissions unit.
3. Compliance with the HAP emissions limitations specified in term and condition A.2.b shall be determined by the required record keeping in term and condition C.3.

**F. Miscellaneous Requirements**

1. The terms and conditions of this air permit to install supercede the terms and conditions of air permit to install number 14-04261 issued May 14, 1997.
2. The following terms and conditions of this permit are federally enforceable: A, B, C.1 - C.3, D and E.

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**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 - (P007) - Vacuum Assisted Resin Transfer Molding 1**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 7.3 tons per year.  The requirements of this rule include compliance with OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).  See term and condition B.1.
OAC rule 3745-31-05(C) Synthetic minor to avoid 40 CFR Part 63 Subpart WWWW and Title V permitting	See term and condition A.2.b.  For purposes of federal major stationary source applicability determinations, all annual organic compound emissions are considered volatile organic compound emissions.
OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.
ORC 3704.03 (T)(4)	See term and condition A.2.c.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emissions limitations, except for volatile organic compound emissions as stated in term A.2.c.
- 2.b The total allowable emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units P001 (Filament Winding Equipment with Resin Bath), P002 (Spray Resin Layup on Dry Filament Winding), P003 (Spray Resin Layup on Taped Filament Winding), P006 (Gelcoat application), P007 (Vacuum Assisted Resin Transfer Molding 1), P008 (Assembly and Manual Resin Application), P009 (Vacuum Assisted Resin

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Transfer Molding 2), P010 (Cowles Resin Mixer), P011 (Plant-wide Cleanup) all de minimus emissions units (as defined in OAC rule 3745-15-05), all emissions units exempt from the requirement to obtain a permit to install pursuant to OAC rule 3745-31-03 currently, and future to-be-installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP, as a rolling, 365-day summation, and 24.9 TPY for any combination of HAPs, as a rolling, 365-day summation.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- 2.c** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compound (VOC) emissions from this air contaminant source because the calculated annual emission rate for VOC is less than ten tons per year, taking into account the federally enforceable rule emission limitation of 40 pounds per day of organic compounds under OAC rule 3745-21-07(G)(2).

**B. Operational Restrictions**

1. The permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating (resin or gel coat) employed;
  - b. the amount of each coating (resin or gel coat) employed, in pounds;
  - c. the organic compound content, recorded in percent weight, of each coating (resin or gel coat); and
  - d. the total organic compound emission rate from all coatings (resin and gel coat), in pounds per day [ the summation of (b x c) x (emission factor of 0.02 lb emitted per lb employed) for all resins and gel coats employed during the day].

[Note: The coating information must be for the coatings as employed, including

Emissions Unit ID: P007

any thinning solvents added at the emissions unit. ]

- e. the total number of hours the emission unit was in operation; and
  - f. the average hourly organic compound emission rate for all coatings, i.e., (d)/(e), in pounds per hour.
2. The permittee shall summarize the emissions from the records maintained in term C.1 on a monthly basis and shall total the emissions at the end of the calendar year.
  3. The permittee shall collect and record the following information for each day for the emissions units identified in term and condition A.2.b:
    - a. the company identification for each coating (resin and gel coat) employed;
    - b. the amount of each coating (resin and gel coat) employed, in pounds;
    - c. the HAP content, recorded in percent weight, of each coating (resin and gel coat);
    - d. the total individual HAP emissions for each HAP from all liquid organic materials employed, in pounds or tons per day [for each HAP the product of (b) times (c), times the emissions factor of 0.02 lb emitted per lb employed];
    - e. the updated rolling, 365-day summation for each individual HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day;
    - f. the total combined HAP emissions from all liquid organic materials employed, in pounds per day; and
    - g. the updated rolling, 365-day summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact.

4. The permit to install for these emissions units P001, P002, P003, P006 thru P011 were

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evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application and supplemental information after submittal of the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene  
TLV (ug/m3): 85.2  
Maximum Hourly Emission Rate (lbs/hr): 44.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1500  
MAGLC (ug/m3): 2024

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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

Emissions Unit ID: P007

diameter, etc.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that contain the following information:
  - a. An identification of each day during which the average hourly OC emissions from the coating materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day; and
  - b. An identification of each day during which the OC emissions from the coating materials exceeded 40 pounds per day, and the actual OC emissions for each such day.

The reports shall identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance.

2. All deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations outlined in term and condition A.2.b. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively.)
4. The permittee shall submit an annual report to the Hamilton County Department of Environmental Services which specifies the total organic compound emissions from this emissions unit. This report shall be submitted by January 31 of each year and cover the previous calendar year.

#### **E. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.1 shall be determined

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by the following methods:

Emission Limitations:

8 lbs/hr and 40 lbs/day of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in term and condition C.1.

Emission Limitation:

7.3 TPY of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in terms and conditions C.1 and C.2.

2. Formulation data or U.S. EPA method 24 (for coatings) shall be used to determine the OC contents of the materials employed in this emissions unit.
3. Compliance with the HAP emissions limitations specified in term and condition A.2.b shall be determined by the required record keeping in term and condition C.3.

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**F. Miscellaneous Requirements**

1. The terms and conditions of this air permit to install supercede the terms and conditions of air permit to install number 14-04261 issued May 14, 1997.
2. The following terms and conditions of this permit are federally enforceable: A, B, C.1 - C.3, D and E.

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**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 - (P008) - Assembly and Manual Resin Application**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 7.3 tons per year.  The requirements of this rule include compliance with OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).  See term and condition B.1.
OAC rule 3745-31-05(C) Synthetic minor to avoid 40 CFR Part 63 Subpart WWWW and Title V permitting	See term and condition A.2.b.  For purposes of federal major stationary source applicability determinations, all annual organic compound emissions are considered volatile organic compound emissions.
OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.
ORC 3704.03 (T)(4)	See term and condition A.2.c.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emissions limitations, except for volatile organic compound emissions as stated in term A.2.c.
- 2.b The total allowable emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units P001 (Filament Winding Equipment with Resin Bath), P002 (Spray Resin Layup on Dry Filament Winding), P003 (Spray Resin Layup on Taped Filament Winding), P006 (Gelcoat application), P007 (Vacuum Assisted Resin Transfer Molding 1), P008 (Assembly and Manual Resin Application), P009 (Vacuum Assisted Resin

Emissions Unit ID: **P008**

Transfer Molding 2), P010 (Cowles Resin Mixer), P011 (Plant-wide Cleanup) all de minimus emissions units (as defined in OAC rule 3745-15-05), all emissions units exempt from the requirement to obtain a permit to install pursuant to OAC rule 3745-31-03 currently, and future to-be-installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP, as a rolling, 365-day summation, and 24.9 TPY for any combination of HAPs, as a rolling, 365-day summation.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- 2.c** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compound (VOC) emissions from this air contaminant source because the calculated annual emission rate for VOC is less than ten tons per year, taking into account the federally enforceable rule emission limitation of 40 pounds per day of organic compounds under OAC rule 3745-21-07(G)(2).

## **B. Operational Restrictions**

1. The permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating (resin or gel coat) employed;
  - b. the amount of each coating (resin or gel coat) employed, in pounds;
  - c. the organic compound content, recorded in percent weight, of each coating (resin or gel coat); and
  - d. the total organic compound emission rate from all coatings (resin, gel coat and adhesives), in pounds per day [ the summation of (b/2000 pounds/ton) x (emission factor found in the Composite Fabricators Association Unified Emission Factors for Open Molding of Composites) for all resins and gel coats employed during the day For adhesives, the emission factor is 0.05 lb emitted / lb OC used].

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[Note: The coating/adhesive information must be for the materials as employed, including any thinning solvents added at the emissions unit. ]

- e. the total number of hours the emission unit was in operation; and
  - f. the average hourly organic compound emission rate for all coatings, i.e., (d)/(e), in pounds per hour.
2. The permittee shall summarize the emissions from the records maintained in term C.1 on a monthly basis and shall total the emissions at the end of the calendar year.
  3. The permittee shall collect and record the following information for each day for the emissions units identified in term and condition A.2.b:
    - a. the company identification for each coating (resin and gel coat) employed;
    - b. the amount of each coating (resin and gel coat) employed, in pounds;
    - c. the HAP content, recorded in percent weight, of each coating (resin and gel coat);
    - d. the total individual HAP emissions for each HAP from all liquid organic materials employed, (resin, gel coat and adhesives), in pounds per day [the summation of (b x c) x (emission factor found in the Composite Fabricators Association Unified Emission Factors for Open Molding of Composites) for all resins and gel coats employed during the day. For adhesives, the emission factor is 0.05 lb emitted / lb HAP used].;
    - e. the updated rolling, 365-day summation for each individual HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day;
    - f. the total combined HAP emissions from all liquid organic materials employed, in pounds per day; and
    - g. the updated rolling, 365-day summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this

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permit, this shall be a cumulative total for each day.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact.

4. The permit to install for these emissions units P001, P002, P003, P006 thru P011 were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application and supplemental information after submittal of the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other

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approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 85.2

Maximum Hourly Emission Rate (lbs/hr): 44.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1500

MAGLC (ug/m3): 2024

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

## **D. Reporting Requirements**

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1. The permittee shall submit deviation (excursion) reports that contain the following information:
  - a. An identification of each day during which the average hourly OC emissions from the coating materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day; and
  - b. An identification of each day during which the OC emissions from the coating materials exceeded 40 pounds per day, and the actual OC emissions for each such day.

The reports shall identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance.

2. All deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations outlined in term and condition A.2.b. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively.)
4. The permittee shall submit an annual report to the Hamilton County Department of Environmental Services which specifies the total organic compound emissions from this emissions unit. This report shall be submitted by January 31 of each year and cover the previous calendar year.

## **E. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.1 shall be determined by the following methods:

Emission Limitations:

8 lbs/hr and 40 lbs/day of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in term and condition C.1.

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Emission Limitation:

7.3 TPY of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in terms and conditions C.1 and C.2.

2. Formulation data or U.S. EPA method 24 (for coatings) shall be used to determine the OC contents of the materials employed in this emissions unit.
3. Compliance with the HAP emissions limitations specified in term and condition A.2.b shall be determined by the required record keeping in term and condition C.3.

**F. Miscellaneous Requirements**

1. The terms and conditions of this air permit to install supercede the terms and conditions of air permit to install number 14-04261 issued May 14, 1997.
2. The following terms and conditions of this permit are federally enforceable: A, B, C.1 - C.3, D and E.

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**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 - (P009) - Vacuum Assisted Resin Transfer Molding 2**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 7.3 tons per year.  The requirements of this rule include compliance with OAC rule 3745-21-07(G)(2) and OAC rule 3745-31-05(C).  See term and condition B.1.
OAC rule 3745-31-05(C) Synthetic minor to avoid 40 CFR Part 63 Subpart WWWW and Title V permitting	See term and condition A.2.b.  For purposes of federal major stationary source applicability determinations, all annual organic compound emissions are considered volatile organic compound emissions.
OAC rule 3745-21-07(G)(2)	Organic compound emissions shall not exceed 8 pounds per hour and 40 pounds per day.
ORC 3704.03 (T)(4)	See term and condition A.2.c.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emissions limitations, except for volatile organic compound emissions as stated in term A.2.c.
- 2.b The total allowable emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units P001 (Filament Winding Equipment with Resin Bath), P002 (Spray Resin Layup on Dry Filament Winding), P003 (Spray Resin Layup on Taped Filament Winding), P006 (Gelcoat application), P007 (Vacuum Assisted Resin Transfer Molding 1), P008 (Assembly and Manual Resin Application), P009 (Vacuum Assisted Resin

Emissions Unit ID: P009

Transfer Molding 2), P010 (Cowles Resin Mixer), P011 (Plant-wide Cleanup) all de minimus emissions units (as defined in OAC rule 3745-15-05), all emissions units exempt from the requirement to obtain a permit to install pursuant to OAC rule 3745-31-03 currently, and future to-be-installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP, as a rolling, 365-day summation, and 24.9 TPY for any combination of HAPs, as a rolling, 365-day summation.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- 2.c** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compound (VOC) emissions from this air contaminant source because the calculated annual emission rate for VOC is less than ten tons per year, taking into account the federally enforceable rule emission limitation of 40 pounds per day of organic compounds under OAC rule 3745-21-07(G)(2).

## **B. Operational Restrictions**

1. The permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating (resin or gel coat) employed;
  - b. the amount of each coating (resin or gel coat) employed, in pounds;
  - c. the organic compound content, recorded in percent weight, of each coating (resin or gel coat); and
  - d. the total organic compound emission rate from all coatings (resin and gel coat), in pounds per day [ the summation of (b x c) x (emission factor of 0.02 lb emitted per lb employed) for all resins and gel coats employed during the day].

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

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- e. the total number of hours the emission unit was in operation; and
  - f. the average hourly organic compound emission rate for all coatings, i.e., (d)/(e), in pounds per hour.
2. The permittee shall summarize the emissions from the records maintained in term C.1 on a monthly basis and shall total the emissions at the end of the calendar year.
  3. The permittee shall collect and record the following information for each day for the emissions units identified in term and condition A.2.b:
    - a. the company identification for each coating (resin and gel coat) employed;
    - b. the amount of each coating (resin and gel coat) employed, in pounds;
    - c. the HAP content, recorded in percent weight, of each coating (resin and gel coat);
    - d. the total individual HAP emissions for each HAP from all liquid organic materials employed, in pounds or tons per day [for each HAP the product of (b) times (c) times the emissions factor of 0.02 lb emitted per lb employed];
    - e. the updated rolling, 365-day summation for each individual HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day;
    - f. the total combined HAP emissions from all liquid organic materials employed, in pounds per day; and
    - g. the updated rolling, 365-day summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact.

4. The permit to install for these emissions units P001, P002, P003, P006 thru P011 were

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evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application and supplemental information after submittal of the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 85.2

Maximum Hourly Emission Rate (lbs/hr): 44.44

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Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1500  
MAGLC (ug/m3): 2024

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that contain the following information:
  - a. An identification of each day during which the average hourly OC emissions from the coating materials exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day; and

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- b. An identification of each day during which the OC emissions from the coating materials exceeded 40 pounds per day, and the actual OC emissions for each such day.

The reports shall identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance.

2. All deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations outlined in term and condition A.2.b. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively.)
4. The permittee shall submit an annual report to the Hamilton County Department of Environmental Services which specifies the total organic compound emissions from this emissions unit. This report shall be submitted by January 31 of each year and cover the previous calendar year.

#### **E. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.1 shall be determined by the following methods:

Emission Limitations:

8 lbs/hr and 40 lbs/day of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in term and condition C.1.

Emission Limitation:

7.3 TPY of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in terms and conditions C.1 and C.2.

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2. Formulation data or U.S. EPA method 24 (for coatings) shall be used to determine the OC contents of the materials employed in this emissions unit.
3. Compliance with the HAP emissions limitations specified in term and condition A.2.b shall be determined by the required record keeping in term and condition C.3.

**F. Miscellaneous Requirements**

1. The terms and conditions of this air permit to install supercede the terms and conditions of air permit to install number 14-04261 issued May 14, 1997.
2. The following terms and conditions of this permit are federally enforceable: A, B, C.1 - C.3, D and E.

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**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 - (P010) - Cowles Resin Mixer**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 132.5 pounds per day and 24.18 tons per year.  The requirements of this rule include compliance with OAC rule 3745-31-05(C).
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 4.10 pounds per hour.
OAC rule 3745-31-05(C)	See term and condition A.2.b.  For purposes of federal major stationary source applicability determinations, all annual organic compound emissions are considered volatile organic compound emissions.
ORC 3704.03 (T)(4)	See term and condition A.2.c.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the emission limitations listed in term A.1.
- 2.b The total allowable emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from emissions units P001 (Filament Winding Equipment with Resin Bath), P002 (Spray Resin Layout on Dry Filament Winding), P003 (Spray Resin Layout on Taped Filament Winding), P006 (Gelcoat application), P007 (Vacuum Assisted Resin Transfer Molding 1), P008 (Assembly and Manual Resin Application), P009 (Vacuum Assisted Resin

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Transfer Molding 2), P010 (Cowles Resin Mixer), P011 (Plant-wide Cleanup) all emissions units exempt from the requirement to obtain a permit to install pursuant to OAC rule 3745-31-03 currently, and future to-be-installed air contaminant sources, combined, shall not exceed 9.9 TPY for any single HAP, as a rolling, 365-day summation, and 24.9 TPY for any combination of HAPs, as a rolling, 365-day summation.

The permittee has existing records to demonstrate compliance with this emission limitation upon permit issuance.

- 2.c** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate matter (PM) and particulate matter less than 10 micron in diameter (PM10) emissions from this air contaminant source because the calculated annual emission rate for PM and PM10 is less than ten tons per year.

**B. Operational Restrictions**

1. The permittee shall keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each resin mixed;
  - b. the amount of each resin mixed, in pounds;
  - c. the organic compound content, recorded in percent weight, of each resin; and
  - d. the total organic compound emission rate from all resin, in pounds per day [the summation of (b x c) x (emission factor of 0.005 lb emitted per lb of OC mixed) for all resins mixed during the day].

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

2. The permittee shall summarize the emissions from the records maintained in term C.1

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on a monthly basis and shall total the emissions at the end of the calendar year.

3. The permittee shall collect and record the following information for each day for the emissions units identified in term and condition A.2.b:
  - a. the company identification for each resin mixed;
  - b. the amount of each resin mixed, in pounds;
  - c. the HAP content, recorded in percent weight, of each resin;
  - d. the total individual HAP emissions for each HAP from all liquid organic materials employed, in pounds per day [for each HAP the summation of (b x c) x (emission factor of 0.005 lb emitted per lb of HAP mixed) for all resins mixed during the day];
  - e. the updated rolling, 365-day summation for each individual HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day;
  - f. the total combined HAP emissions from all liquid organic materials employed, in pounds per day; and
  - g. the updated rolling, 365-day summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current day and the preceding 364 days. For the first 365 days of operation following issuance of this permit, this shall be a cumulative total for each day.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact.

4. The permit to install for these emissions units P001, P002, P003, P006 thru P011 were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application and supplemental information after submittal of the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the

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SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 85.2

Maximum Hourly Emission Rate (lbs/hr): 44.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1500

MAGLC (ug/m3): 2024

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

## **D. Reporting Requirements**

Emissions Unit ID: P010

1. The permittee shall submit deviation (excursion) reports that contain the following information:
  - a. An identification of each day during which the OC emissions from this emissions unit exceeded 132.5 pounds per day, and the actual OC emissions for each such day.

The reports shall identify all exceedances of this limitation, as well as the corrective actions that were taken to achieve compliance.
2. All deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.
3. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emission limitations outlined in term and condition A.2.b. If no exceedances occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively.)
4. The permittee shall submit an annual report to the Hamilton County Department of Environmental Services which specifies the total organic compound emissions from this emissions unit. This report shall be submitted by January 31 of each year and cover the previous calendar year.

#### **E. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.1 shall be determined by the following methods:

Emission Limitation:

132.5 lbs/day of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in term and condition C.1.

Emission Limitation:

24.18 TPY of OC emissions from coatings in this emissions unit.

Applicable Compliance Method:

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Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in terms and conditions C.1 and C.2.

2. Formulation data or U.S. EPA method 24 (for coatings) shall be used to determine the OC contents of the materials employed in this emissions unit.
3. Compliance with the HAP emission limitations specified in term and condition A.2.b shall be determined by the required record keeping in term and condition C.3.

**F. Miscellaneous Requirements**

1. The terms and conditions of this air permit to install supercede the terms and conditions of air permit to install number 14-04261 issued May 14, 1997.
2. The following terms and conditions of this permit are federally enforceable: A, B, C.1 - C.3, D and E.

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**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 - (P011) - Plant-wide Cleanup Materials**

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Organic compound emissions shall not exceed 3900 pounds per month and 23.36 tons per year.

**2. Additional Terms and Conditions**

- 2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the mass emission limitations listed in term A.1.

**B. Operational Restrictions**

1. The permittee shall not employ any hazardous air pollutants or volatile organic compounds in this emissions unit.
2. The permittee shall employ no photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5) in this emissions unit.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall collect and record the following information for each month for plant wide cleanup:
  - a. the company identification for each cleanup material employed;
  - b. the amount of each cleanup material employed, in pounds; and
  - c. the total organic compound emission rate from all cleanup materials.

These records shall be summarized at the end of each calendar year.

Emissions Unit ID: P011

2. The permit to install for these emissions units P001, P002, P003, P006 thru P011 were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application and supplemental information after submittal of the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) 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: Acetone

TLV (ug/m3): 1188

Maximum Hourly Emission Rate (lbs/hr): 44.44

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1500

MAGLC (ug/m3): 28285

The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(d), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- 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

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diameter, etc.).

The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.

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**D. Reporting Requirements**

1. The permittee shall submit an annual report to the Hamilton County Department of Environmental Services which specifies the total organic compound emissions from this emissions unit. This report shall be submitted by January 31 of each year and cover the previous calendar year.
2. The permittee shall notify the Hamilton County Department of Environmental Services of the use of any photochemically reactive materials, any HAP materials or any volatile organic compound materials in this emissions unit. If no deviations occurred, the permittee shall state so in the report. The reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively.)

**E. Testing Requirements**

1. Compliance with the emission limitations specified in Section A.1 shall be determined by the following methods:  
  
Emission Limitations:  
3900 lbs/month of OC emissions and 23.36 tpy from cleanup materials in this emissions unit.  
  
Applicable Compliance Method:  
Compliance with the OC emission limitations shall be determined by the record keeping requirements specified in term and condition C.1.
2. Formulation data or U.S. EPA method 24 (for coatings) shall be used to determine the OC contents of the materials employed in this emissions unit.

**F. Miscellaneous Requirements**

1. The terms and conditions of this Permit To Install supercede the terms and conditions of Permit To Install 14-04261 issued May 14, 1997.