

Facility ID: 0317010027 Issuance type: Title V Final Permit

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part III" and before "I. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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Part II - Specific Facility Terms and Conditions

a State and Federally Enforceable Section

1. Total organic compound (OC) emissions resulting from cleanup operations at this facility shall not exceed 142.2 tons per rolling 12-month period, i.e., OC emissions are based upon a rolling 12-month summation of the monthly emissions. This equates to 43,156 gallons of solvent (acetone) at a density of 6.59 lbs/gal. [PTI 03-9201, issued on 10/2/96, which is equal to or more stringent than PTI-03-3023, issued on 4/8/87, and PTI 03-8571, issued on 6/28/95]
2. The permittee shall collect and record the following information for each month for the cleanup operations at this facility:
 - a. the company identification for each OC-containing cleanup material employed;
 - b. the number of gallons of each OC-containing cleanup material employed;
 - c. the OC content of each OC-containing cleanup material, in pounds per gallon;
 - d. the number of pounds of waste solvent, minus any solids, etc., sent off-site for disposal and/or reclamation;
 - e. the OC emissions for the month, in pounds, based on the summation of (b) x (c) for all cleanup materials minus (d); and
 - f. the total OC emissions for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months], in pounds and tons (rounded off to the nearest 0.1 ton).
3. The permittee shall immediately notify (i.e., as soon as practical) the appropriate Ohio EPA District Office of any exceedance of the emission limitation of 142.2 tons OC per rolling 12-month period for cleanup operations at this facility [PTI 03-9201, issued 10/2/96]. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each month during which the rolling 12-month OC emissions from the cleanup operations at the facility exceeded 142.2 tons, and the actual rolling 12-month OC emissions.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

4. Work practice standards*:
 - a. All containers in this facility containing OC shall be equipped with covers and shall remain covered whenever not in use.
 - b. Employees working at any lay-up station (i.e., emissions units R005-R019 and R022-R031) shall be issued no more than 2.5 gallons of acetone per person per day.
 - c. The permittee shall maintain a daily log of the amount (gallons) of acetone issued per source (emissions unit).

*from PTI 03-3023, PTI 03-8571, and PTI 03-9201

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

Emission Limitation:
142.2 tons OC per rolling 12-month period, for cleanup operations at the facility

Applicable Compliance Method:
Compliance with the limitation above shall be based on the record keeping requirements contained in section A.2. of these terms and conditions.

Formulation data or USEPA Method 24 shall be used to determine the OC content of each cleanup material. Waste analysis data or USEPA Method 24 shall be used to determine the OC content of each waste solvent.

6. On August 22, 2001, U.S. EPA promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Boat Manufacturing, 40 CFR Part 63 Subpart VVVV. The effective date for this NESHAP standard is August 22, 2001. This facility is subject to Subpart VVVV as an existing major source with a compliance date of August 23, 2004, as specified under 40 CFR 63.5695 and Table 1 to Subpart VVVV. Pursuant to 40 CFR 63.5761 and Table 7 to Subpart VVVV, the permittee shall submit the following notifications:

a. Initial Notification: Shall be submitted not later than 120 days after the effective date of the standard and shall contain the information specified in 40 CFR 63.9(b)(2).

b. Notification of Compliance Status: Shall be submitted by the date specified in Table 7 to Subpart VVVV (date based on means of compliance) and shall contain the information specified in 40 CFR 63.9(h)(2)(i)(A) through (G).

c. Other Notifications: Where applicable, other notifications under 40 CFR 63.5761(b) or Table 7 to Subpart VVVV shall be submitted in accordance with the requirements specified for such notifications.

In accordance with paragraph A.10.a. of the Part I - General Terms and Conditions this permit, the permittee shall submit an application to reopen this permit within 18 months after promulgation of this NESHAP standard.

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b State Only Enforceable Section

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

Flotation Foam Injection & Hull Finishing, Ohio EPA emissions unit P001;
Grinding Area - Dust Collection System, Ohio EPA emissions unit P002;
Woodworking - Cyclone and Baghouse, Ohio EPA emissions unit P003;
6000-gallon acetone storage tank AT-1, Ohio EPA emissions unit T003;
1500-gallon acetone storage tank AT-2, Ohio EPA emissions unit T004;
6000-gallon resin storage tank RT-3, Ohio EPA emissions unit T005;
6000-gallon resin storage tank RT-4, Ohio EPA emissions unit T006;
6000-gallon resin storage tank RT-5, Ohio EPA emissions unit T007;
Assembly - Small Boats, Ohio EPA emissions unit Z001;
Engine Compartment Painting, Ohio EPA emissions unit Z002;
Mold Maintenance, Ohio EPA emissions unit Z003;
Research & Development, Ohio EPA emissions unit Z004;
Assembly - Big Boats, Ohio EPA emissions unit Z005; and
Assembly Area for Twin Engine Boats, Ohio EPA emissions unit Z006.

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

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R001 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
gel coat spray booth 1	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from gel coats)
		See A.II.1.
	OAC 3745-17-11(B)(2)	none (See A.I.2.a.)
	OAC 3745-17-07(A)	none (See A.I.2.b.)
	OAC 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87)	5.74 tons VOC/yr (from gel coats)
		The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A).

2. Additional Terms and Conditions

- a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

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II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each gel coat (polyester resin) employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
 total OC emissions (pounds) = A x B x 0.596

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above]

0.596 = weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on a worst case 45% monomer content for gel coats, with baseline values for other variables in the model);

d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];

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

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

2. The permittee shall collect and record the following information each month for the gel coats (polyester resins) employed in this emissions unit:
 - a. the total VOC emissions from the gel coats employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the gel coats employed during the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01(B)(6).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the gel coats exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the gel coats exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the gel coats for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from gel coats)
5.74 ton VOC/yr (from gel coats)

Applicable Compliance Method:
Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each gel coat.
2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R001 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R002 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
gel coat spray booth 2	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from gel coats)
		See A.II.1.
	OAC 3745-17-11(B)(2)	none (See A.I.2.a.)
	OAC 3745-17-07(A)	none (See A.I.2.b.)
	OAC 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87)	5.74 tons VOC/yr (from gel coats)

The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A).

2. Additional Terms and Conditions

- a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

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II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each gel coat (polyester resin) employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

 total OC emissions (pounds) = A x B x 0.596

 where:

 A = weight of each polyester resin [from (a) above]

 B = weight fraction of monomer (OC) for each polyester resin [from (b) above]

 0.596 = weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI

(based on a worst case 45% monomer content for gel coats, with baseline values for other variables in the model);

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average).
2. The permittee shall collect and record the following information each month for the gel coats (polyester resins) employed in this emissions unit:
 - a. the total VOC emissions from the gel coats employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the gel coats employed during the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01(B)(6).
 3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the gel coats exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the gel coats exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the gel coats for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
 8 lbs OC per hr, 40 lbs OC per day (from gel coats)
 5.74 ton VOC/yr (from gel coats)

Applicable Compliance Method:
 Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each gel coat.
2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

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VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R002 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R003 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
gel coat spray booth 3	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from gel coats)
	OAC 3745-17-11(B)(2)	See A.II.1.
	OAC 3745-17-07(A)	none (See A.I.2.a.)
	OAC 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87)	none (See A.I.2.b.) 5.74 tons VOC/yr (from gel coats)

The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A).

2. Additional Terms and Conditions

- a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

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II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each gel coat (polyester resin) employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

total OC emissions (pounds) = A x B x 0.596

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above]

0.596 = weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on a worst case 45% monomer content for gel coats, with baseline values for other variables in the model);
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average).

2. The permittee shall collect and record the following information each month for the gel coats (polyester resins) employed in this emissions unit:
 - a. the total VOC emissions from the gel coats employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the gel coats employed during the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01(B)(6).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the gel coats exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the gel coats exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the gel coats for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from gel coats)
5.74 ton VOC/yr (from gel coats)

Applicable Compliance Method:
Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each gel coat.
2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

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VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R003 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R004 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
gel coat spray booth 4	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from gel coats)
	OAC 3745-17-11(B)(2)	See A.II.1.
	OAC 3745-17-07(A)	none (See A.I.2.a.)
	OAC 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87)	none (See A.I.2.b.) 5.74 tons VOC/yr (from gel coats)
The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A).		

2. **Additional Terms and Conditions**

- a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each gel coat (polyester resin) employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

total OC emissions (pounds) = A x B x 0.596

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above]

0.596 = weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on a worst case 45% monomer content for gel coats, with baseline values for other variables in the model);
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation; and
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average).
2. The permittee shall collect and record the following information each month for the gel coats (polyester resins) employed in this emissions unit:
 - a. the total VOC emissions from the gel coats employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the gel coats employed during the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01 (B)(6).

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the gel coats exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the gel coats exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the gel coats for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from gel coats)
5.74 ton VOC/yr (from gel coats)

Applicable Compliance Method:
Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each gel coat.
2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

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VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R004 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0317010027 Emissions Unit ID: R005 Issuance type: Title V Final Permit

A. **State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 1	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per

day
(from polyester resins)

See A.II.1.

OAC 3745-31-05(A)(3) 4.2 tons OC/yr
(PTI 03-9201, issued on 10/2/96, (from polyester resins)
which modified the annual OC

See A.II.2.

emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87) The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

(a) None

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

total OC emissions (pounds) = A x B x EF

where:
A = weight of each polyester resin [from (a) above]
B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
EF =
0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:

- a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
- a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
- a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
- a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
- Emission Limitations:
 8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
 4.2 ton OC /yr (from polyester resins)
- Applicable Compliance Method:
 The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.
- Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
- a. Operational Restriction:
 Any cleanup material shall not be a photochemically reactive material.
- Applicable Compliance Method:
 Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

- 1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R005 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**

- 1. None

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II. **Operational Restrictions**

- 1. None

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III. **Monitoring and/or Record Keeping Requirements**

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 0317010027 Issuance type: Title V Final Permit

Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R006 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 2	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins)
		See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. Operational Restrictions

- 1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
 total OC emissions (pounds) = A x B x EF
 where:
 A = weight of each polyester resin [from (a) above]
 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**
 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);
 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);
 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. **Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.

- b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
- c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
- d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
- e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
- f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
- g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)
 - Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.
 - Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.
 - Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.
 - Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R006 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R007 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 3	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. Operational Restrictions

- 1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

 total OC emissions (pounds) = A x B x EF

 where:

 A = weight of each polyester resin [from (a) above]

 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**

 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

 (the two formulae above are based on the permittee's representation that the weighted daily average resin

monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
 3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
 4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
 4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:
 The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

a. Operational Restriction:
 Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
 Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

b. Operational Restrictions:
 Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:
 Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

c. Operational Restrictions:
 OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
 Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R007 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		

- 1. None

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R008 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 4	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins)
		See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) None

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
 total OC emissions (pounds) = A x B x EF
 where:
 A = weight of each polyester resin [from (a) above]
 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**
 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);
 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);
 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R008 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R009 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 5	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

total OC emissions (pounds) = A x B x EF

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
 3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
 4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in

section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.

g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R009 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R010 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 6	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins)
		See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) None

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

total OC emissions (pounds) = A x B x EF

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =
0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and

- j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
- 2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
- 3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

- 1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)
 - Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
- 2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

- 1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R010 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**

- 1. None

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II. **Operational Restrictions**

- 1. None

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III. **Monitoring and/or Record Keeping Requirements**

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R011 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 7	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. Operational Restrictions

- 1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content

of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
 total OC emissions (pounds) = A x B x EF
 where:
 A = weight of each polyester resin [from (a) above]
 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**
 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);
 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);
 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:

- a. Each month during which a photochemically reactive material was employed for cleanup.
- b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
- c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
- d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
- e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
- f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
- g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)
 - Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.
 - Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.
 - Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.
 - Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the

latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R011 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2.	Additional Terms and Conditions		
1.	None		

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R012 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 8	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. Operational Restrictions

- 1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

total OC emissions (pounds) = A x B x EF

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =
0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on

38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
 3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
 4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in

accordance with the following method(s):

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R012 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

- | | <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|----|---|--------------------------------------|--|
| 2. | Additional Terms and Conditions | | |
| 1. | None | | |

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R013 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 9	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions	See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2.

unit specified in PTI 03-3023, issued on 4/8/87)

The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) None

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
 total OC emissions (pounds) = A x B x EF
 where:
 A = weight of each polyester resin [from (a) above]
 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**
 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);
 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);
 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this

emissions unit:

- a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
- a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

- 1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R013 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. **Operational Restrictions**

- 1. None

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III. **Monitoring and/or Record Keeping Requirements**

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0317010027 Emissions Unit ID: R014 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 10	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) None

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);

- b. the weight fraction of monomer (OC) for each polyester resin (as applied);
- c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
- $$\text{total OC emissions (pounds)} = A \times B \times EF$$
- where:
- A = weight of each polyester resin [from (a) above]
- B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
- EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**
- * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);
- ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);
- (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
- e. the total number of hours the emissions unit was in operation;
- f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
- g. the amount, in gallons, of each polyester resin/catalyst material employed;
- h. the volume fraction of OC for each polyester resin and each catalyst;
- i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
- j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
- a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
- b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
- a. the company identification for each cleanup material employed; and
- b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
- a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
- b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
- a. Each month during which a photochemically reactive material was employed for cleanup.
- b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
- c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
- d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.

- e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
- f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
- g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. **Testing Requirements**

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)
 - Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.
 - Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.
 - Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.
 - Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R014 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 0317010027 Emissions Unit ID: R015 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 11	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) None

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

 total OC emissions (pounds) = A x B x EF

 where:

 A = weight of each polyester resin [from (a) above]

 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**

 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);

- g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
- 2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
- 3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

- 1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 - Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)
 - Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R015 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R016 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 12	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
 total OC emissions (pounds) = A x B x EF
 where:
 A = weight of each polyester resin [from (a) above]
 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**
 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);
 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);
 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
- b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R016 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R017 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 13	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins) See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION.

II. Operational Restrictions

- 1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$
 where:
 - A = weight of each polyester resin [from (a) above]
 - B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
 - EF =

- 0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
 3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
 4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. **Testing Requirements**

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R017 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R018 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 14	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)

OAC 3745-31-05(A)(3)
 (PTI 03-9201, issued on 10/2/96,
 which modified the annual OC
 emissions limit for this emissions
 unit specified in PTI 03-3023, issued
 on 4/8/87)

See A.II.1.
 4.2 tons OC/yr
 (from polyester resins)

See A.II.2.

The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) None

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

 total OC emissions (pounds) = A x B x EF

 where:

 A = weight of each polyester resin [from (a) above]

 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**

 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and

- b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
- 3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.
 - e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month

period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. Miscellaneous Requirements

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R018 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R019 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 15	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-9201, issued on 10/2/96, which modified the annual OC emissions limit for this emissions unit specified in PTI 03-3023, issued on 4/8/87)	See A.II.1. 4.2 tons OC/yr (from polyester resins)
		See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) None

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II. **Operational Restrictions**

- 1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall not employ more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 35 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-9201, issued on 10/2/96]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
 total OC emissions (pounds) = A x B x EF
 where:
 A = weight of each polyester resin [from (a) above]
 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**
 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);
 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);
 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall collect and record the following information each month for the polyester resins employed in this emissions unit:
 - a. the total OC emissions from the polyester resins employed during the month, i.e., the summation of the A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative OC emissions from the polyester resins employed during the calendar year [i.e., the summation of (a) for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.1 ton).
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
4. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., the summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.

d. Each month during which the cumulative OC emissions from polyester resins for the calendar year exceeded the annual VOC limitation, and the actual cumulative OC emissions for each such month.

e. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.

f. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.

g. Each day during which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. **Testing Requirements**

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

Emission Limitations:

8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

4.2 ton OC /yr (from polyester resins)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:

Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- b. Operational Restrictions:

Employ not more than 13.4 gallons/hr (average), 67 gallons/day, and 14,060 gallons per rolling 12-month period of polyester resin/catalyst material.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 35 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R019 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R020 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
carpet adhesive spray application station 1	OAC rule 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from adhesives)
		See A.II.1.
	OAC 3745-17-11(B)(2)	none (See A.I.2.a.)
	OAC 3745-17-07(A)	none (See A.I.2.b.)
	OAC rule 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87)	1.92 tons VOC/yr (from adhesives)
		The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A).

2. Additional Terms and Conditions

- a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

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II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the adhesives employed in this emissions units:
 - a. the company identification for each adhesive employed;
 - b. the number of gallons of each adhesive employed;
 - c. the OC content of each adhesive material, in pounds per gallon;
 - d. the OC emissions rate for each adhesive material employed, i.e., (b)x(c), in pounds per day
 - e. the total OC emission rate for all adhesives employed, i.e., the summation of (d) for all adhesives, in pounds per day;
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly OC emission rate, i.e., (e)/(f), in pounds per hour (average).

[Note: This information shall be for the adhesives as employed, including any thinning solvents added at the emissions unit.]
2. The permittee shall collect and record the following information each month for the adhesives employed in this emissions unit:
 - a. the total VOC emissions from the adhesives employed during the month, i.e., the summation of A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the adhesives for the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule

3745-21-01(B)(6), unless the permittee's records indicate otherwise.

3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the adhesives exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the adhesives exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each month during which the cumulative VOC emissions from the adhesives for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from adhesives)
1.92 tons VOC/yr (from adhesives)

Applicable Compliance Method:
Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 24 shall be used to determine the OC content of each adhesive.
2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

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VI. Miscellaneous Requirements

1. The distribution of operational load between this emissions unit and emissions unit R021 has changed since the issuance of PTI 03-3023. As a result, the permittee cannot run at its desired capacity and achieve compliance with the current annual emissions limit. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R020 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. **Additional Terms and Conditions**

1. None

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R021 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
carpet adhesive spray application station 2	OAC rule 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from adhesives)

	See A.II.1.
OAC 3745-17-11(B)(2)	none (See A.I.2.a.)
OAC 3745-17-07(A)	none (See A.I.2.b.)
OAC rule 3745-31-05(A)(3) (PTI 03-3023, issued on 4/8/87)	16.92 tons VOC/yr (from adhesives)

The requirements of this rule include compliance with all applicable law, which includes compliance with the requirements of OAC rules 3745-21-07(G)(2), 3745-17-11(B)(2), and 3745-17-07(A).

2. Additional Terms and Conditions

- a. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11(B)(2).
- b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.

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II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for the adhesives employed in this emissions units:
 - a. the company identification for each adhesive employed;
 - b. the number of gallons of each adhesive employed;
 - c. the OC content of each adhesive material, in pounds per gallon;
 - d. the OC emissions rate for each adhesive material employed, i.e., (b)x(c), in pounds per day
 - e. the total OC emission rate for all adhesives employed, i.e., the summation of (d) for all adhesives, in pounds per day;
 - f. the total number of hours the emissions unit was in operation;
 - g. the average hourly OC emission rate, i.e., (e)/(f), in pounds per hour (average).

[Note: This information shall be for the adhesives as employed, including any thinning solvents added at the emissions unit.]
2. The permittee shall collect and record the following information each month for the adhesives employed in this emissions unit:
 - a. the total VOC emissions from the adhesives employed during the month, i.e., the summation of A.III.1.d. values for all days in the month, in pounds; and
 - b. the cumulative VOC emissions from the adhesives for the calendar year [i.e., the summation of (a) above for all months in the calendar year], in pounds and tons (rounded off to the nearest 0.01 ton).

Note: All OC emissions from section A.III.1. are considered to be VOC emissions, as defined in OAC rule 3745-21-01(B)(6), unless the permittee's records indicate otherwise.
3. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.

b. Each day during which the average hourly OC emissions from the adhesives exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.

c. Each day during which the OC emissions from the adhesives exceeded 40 pounds per day, and the actual OC emissions for each such day.

d. Each month during which the cumulative VOC emissions from the adhesives for the calendar year exceeded the annual VOC limitation, and the actual cumulative VOC emissions for each such month.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the General Terms and Conditions of this permit.

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V. **Testing Requirements**

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

Emission Limitations:
 8 lbs OC per hr, 40 lbs OC per day (from adhesives)
 16.92 tons VOC/yr (from adhesives)

Applicable Compliance Method:
 Compliance with the limitations above shall be based on the record keeping requirements contained in section A.III. of this permit.

Formulation data or USEPA Method 24 shall be used to determine the OC content of each adhesive.

2. Compliance with the operational restriction on not employing a cleanup material that is a "photochemically reactive material" shall be based on the record keeping requirements contained in section A.III.3. of this permit.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0317010027 Emissions Unit ID: R021 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. **Operational Restrictions**

1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R022 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 16	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95)	See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. Operational Restrictions

- 1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the

polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
total OC emissions (pounds) = A x B x EF
where:
A = weight of each polyester resin [from (a) above]
B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
EF =
0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.

- d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
- e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
- f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. **Testing Requirements**

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R022 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 0317010027 Emissions Unit ID: R023 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 17	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95)	See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- None

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II. **Operational Restrictions**

- The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

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III. **Monitoring and/or Record Keeping Requirements**

- The permittee shall collect and record the following information each day for this emissions unit:
 - the type and weight, in pounds, of each polyester resin employed (as applied);
 - the weight fraction of monomer (OC) for each polyester resin (as applied);
 - the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

total OC emissions (pounds) = A x B x EF

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =
0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - the total number of hours the emissions unit was in operation;
 - the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - the amount, in gallons, of each polyester resin/catalyst material employed;
 - the volume fraction of OC for each polyester resin and each catalyst;
 - the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and

- j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
- 2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
- 2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Issuance type: Title V Final Permit

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Facility ID: 0317010027 Emissions Unit ID: R023 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0317010027 Issuance type: Title V Final Permit

Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R024 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 18	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95)	See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) None

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);

c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

$$\text{total OC emissions (pounds)} = A \times B \times EF$$

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or

0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];

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

f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);

g. the amount, in gallons, of each polyester resin/catalyst material employed;

h. the volume fraction of OC for each polyester resin and each catalyst;

i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and

j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).

2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:

a. the company identification for each cleanup material employed; and

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

3. The permittee shall collect and record the following information for each month for this emissions unit:

a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and

b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:

a. Each month during which a photochemically reactive material was employed for cleanup.

b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.

c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.

d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.

e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.

f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. **Testing Requirements**

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R024 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall

not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. **Operational Restrictions**

- 1. None

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III. **Monitoring and/or Record Keeping Requirements**

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R025 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 19	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3)	See A.II.1. See A.II.2.

(PTI 03-8571, issued on 6/28/95)

The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) None

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II. **Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

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III. **Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
 total OC emissions (pounds) = A x B x EF
 where:
 A = weight of each polyester resin [from (a) above]
 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**
 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);
 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);
 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and

- b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R025 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 0317010027 Emissions Unit ID: R026 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 20	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95)	See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

 total OC emissions (pounds) = A x B x EF

 where:

 A = weight of each polyester resin [from (a) above]

 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
 3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:

Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:

Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:

OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R026 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 0317010027 Emissions Unit ID: R027 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 21	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95)	See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. Operational Restrictions

1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
 total OC emissions (pounds) = A x B x EF
 where:
 A = weight of each polyester resin [from (a) above]
 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**
 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);
 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);
 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds

per hour, and the actual average hourly OC emissions for each such day.

- c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
- d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
- e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
- f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. **Testing Requirements**

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
 - Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.
 - Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material
 - Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.
 - Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R027 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Facility ID: 0317010027 Emissions Unit ID: R028 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 22	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95)	See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. Operational Restrictions

- 1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

total OC emissions (pounds) = A x B x EF

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =
0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);

- g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
 3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:

Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

- 1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R028 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions			
1.	None		

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II. **Operational Restrictions**

- 1. None

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III. **Monitoring and/or Record Keeping Requirements**

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R029 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 23	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95)	See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. Additional Terms and Conditions

- (a) None

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II. Operational Restrictions

- 1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:
 total OC emissions (pounds) = A x B x EF
 where:
 A = weight of each polyester resin [from (a) above]
 B = weight fraction of monomer (OC) for each polyester resin [from (b) above];
 EF =
 0.106 for resin monomer content 35% or less*, or
 0.113 for resin monomer content greater than 35%**
 * weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);
 ** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);
 (the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the

respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. **Testing Requirements**

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

- b. Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

- c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R029 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

- 1. None

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R030 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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fiberglass/resin lay-up station 24

OAC 3745-21-07(G)(2)

Measures8 lbs organic compounds (OC) per hr, 40 lbs OC per day
(from polyester resins)

See A.II.1.

See A.II.2.

The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

OAC 3745-31-05(A)(3)
(PTI 03-8571, issued on 6/28/95)**2. Additional Terms and Conditions**

(a) None

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1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

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1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

total OC emissions (pounds) = A x B x EF

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =
0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)
 - d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:

- a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
- 3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

- 1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)
 - Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.
 - Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.
- 2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.
 - Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.
 - b. Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material
 - Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.
 - c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.
 - Applicable Compliance Method:

Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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Facility ID: 0317010027 Emissions Unit ID: R030 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. Additional Terms and Conditions		
1. None		

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II. **Operational Restrictions**

1. None

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III. **Monitoring and/or Record Keeping Requirements**

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 0317010027 Issuance type: Title V Final Permit

Part III - Terms and Conditions for Emissions Units

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Facility ID: 0317010027 Emissions Unit ID: R031 Issuance type: Title V Final Permit

A. **State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass/resin lay-up station 25	OAC 3745-21-07(G)(2)	8 lbs organic compounds (OC) per hr, 40 lbs OC per day (from polyester resins)
	OAC 3745-31-05(A)(3) (PTI 03-8571, issued on 6/28/95)	See A.II.1. See A.II.2. The requirements of this rule, as specified in the permit to install (PTI), also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

2. **Additional Terms and Conditions**

- (a) None

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II. **Operational Restrictions**

- 1. The permittee shall not employ any cleanup material in this emissions unit which is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- 2. The permittee shall not employ more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material. The OC (styrene) content of the polyester resin shall not exceed 30 percent by volume (OC solvent density is 7.48 lbs/gal). The OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume (OC solvent density is 7.6 lbs/gal). [PTI 03-8571, issued on 6/28/95]

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III. **Monitoring and/or Record Keeping Requirements**

- 1. The permittee shall collect and record the following information each day for this emissions unit:
 - a. the type and weight, in pounds, of each polyester resin employed (as applied);
 - b. the weight fraction of monomer (OC) for each polyester resin (as applied);
 - c. the total OC emissions, in pounds, for each polyester resin employed, calculated using the following equation:

total OC emissions (pounds) = A x B x EF

where:

A = weight of each polyester resin [from (a) above]

B = weight fraction of monomer (OC) for each polyester resin [from (b) above];

EF =

0.106 for resin monomer content 35% or less*, or
0.113 for resin monomer content greater than 35%**

* weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 35% monomer content for flow coaters, with baseline values for other variables in the model);

** weight fraction of monomer emitted, based on FRP Model 1.0 developed by USEPA and RTI (based on 38% monomer content for flow coaters, with baseline values for other variables in the model);

(the two formulae above are based on the permittee's representation that the weighted daily average resin monomer content for the facility is less than 35%, and therefore should provide conservative estimates)

- d. the total OC emissions, in pounds, for all polyester resins employed [summation of (c) above for all polyester resins];
 - e. the total number of hours the emissions unit was in operation;
 - f. the average hourly OC emission rate, i.e., (d)/(e), in pounds per hour (average);
 - g. the amount, in gallons, of each polyester resin/catalyst material employed;
 - h. the volume fraction of OC for each polyester resin and each catalyst;
 - i. the total gallons of all polyester resins/catalyst materials employed [i.e., summation of (g)]; and
 - j. the average hourly gallon usage of polyester resin/catalyst material, i.e., (i)/(e), in gallons per hour (average).
2. The permittee shall maintain the following information each month for the cleanup materials employed in this emissions unit:
 - a. the company identification for each cleanup material employed; and
 - b. documentation on whether or not each cleanup material employed is a photochemically reactive material.
 3. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the amount, in gallons, of all polyester resins/catalyst materials employed (i.e., the summation of the A.III.1.i. values for all days in the month); and
 - b. the total gallons of all polyester resins/catalyst materials employed for the rolling 12-month period [i.e., summation of (a) for this month and the preceding 11 months].

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each of the following:
 - a. Each month during which a photochemically reactive material was employed for cleanup.
 - b. Each day during which the average hourly OC emissions from the polyester resins exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day.
 - c. Each day during which the OC emissions from the polyester exceeded 40 pounds per day, and the actual OC emissions for each such day.
 - d. Each day during which the average hourly or daily polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual average hourly or daily polyester resin/catalyst usage for each such day.
 - e. Each month during which the rolling 12-month polyester resin/catalyst usage restriction specified in section A.II.2. was exceeded, and the actual rolling 12-month polyester resin/catalyst usage for each such month.
 - f. Each day in which the volume fraction of OC for any polyester resin or catalyst material exceeded the respective limit specified under section A.II.2., and the actual volume fraction of OC for the resin or catalyst for each such day.

The quarterly deviation reports shall be submitted in accordance with paragraph A.1.c. of the Part I - General Terms and Conditions of this permit.

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V. Testing Requirements

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

Emission Limitations:
8 lbs OC per hr, 40 lbs OC per day (from polyester resins)

Applicable Compliance Method:
The permittee shall demonstrate compliance with the limitations above based on the record keeping requirements in section A.III. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the monomer (OC) content of each polyester resin material.

2. Compliance with the operational restrictions in Section A.II. of these terms and conditions shall be determined in accordance with the following method(s):

a. Operational Restriction:
Any cleanup material shall not be a photochemically reactive material.

Applicable Compliance Method:
Compliance with the restriction above shall be based on the record keeping requirements contained in section A.III.3. of this permit.

b. Operational Restrictions:
Employ not more than 14.2 gallons/hr (average), 71 gallons/day, and 24,866 gallons/rolling 12-month period of polyester resin/catalyst material

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

c. Operational Restrictions:
OC (styrene) content of the polyester resin shall not exceed 30 percent by volume; and OC (MEK peroxide) content of the catalyst shall not exceed 95 percent by volume.

Applicable Compliance Method:
Compliance with the restrictions above shall be based on the record keeping requirements contained in section A.III.4. of this permit.

Formulation data or USEPA Method 311 shall be used to determine the OC content of each polyester resin and catalyst material.

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VI. **Miscellaneous Requirements**

1. Previous permit actions for this emissions unit were based upon OC emission factors in the USEPA publication AP-42 from 1988, which are outdated and no longer accepted by Ohio EPA. The permittee cannot run at its desired capacity and achieve compliance with the current emissions limits when using the latest emission factors. Therefore, as the initial step for this emissions unit to achieve compliance with the applicable requirements, the permittee shall submit a complete permit to install modification application within 2 months following the issuance of this permit.

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B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. **Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

1. None

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None