



State of Ohio Environmental Protection Agency

Street Address:

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

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

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

**RE: FINAL PERMIT TO INSTALL  
ASHTABULA COUNTY  
Application No: 02-15434**

**CERTIFIED MAIL**

Y	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
40 CFR 63 Subpart WWW	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE:** 3/14/2002

Iten Industries Plant 3  
Rick Forture  
4001 Benefit Ave  
Ashtabula, OH 44004

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

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

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

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

Very truly yours,

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

CC: USEPA

NEDO



**Permit To Install  
Terms and Conditions**

**Issue Date: 3/14/2002  
Effective Date: 3/14/2002**

**FINAL PERMIT TO INSTALL 02-15434**

Application Number: 02-15434

APS Premise Number: 0204010442

Permit Fee: **\$1800**

Name of Facility: Iten Industries Plant 3

Person to Contact: Rick Forture

Address: 4001 Benefit Ave  
Ashtabula, OH 44004

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

**1303 West 38th St  
Ashtabula, Ohio**

Description of proposed emissions unit(s):

**8 FRP pultrusion units and one politen mix unit.**

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit To Install General Terms and Conditions

#### 1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.10 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **3. Risk Management Plans**

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

## **4. Title IV Provisions**

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

## **5. Severability Clause**

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

## **6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

## **7. Fees**

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

## **8. Federal and State Enforceability**

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

## **9. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## 10. Permit To Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is

granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

**11. Best Available Technology**

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

**12. Air Pollution Nuisance**

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

**B. State Only Enforceable Permit To Install General Terms and Conditions**

**1. Compliance Requirements**

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

**2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

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

**3. Permit Transfers**

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

**4. Termination of Permit To Install**

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

**5. Construction of New Sources(s)**

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

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

## **6. Public Disclosure**

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

## **7. Applicability**

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

## **8. Construction Compliance Certification**

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

## **9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**C. Permit To Install Summary of Allowable Emissions**

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	18.17
PE	0.44

## **Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

### **A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

The total yearly organic compound emissions is 18.17 tons. This amount includes 1.43 tons from cleanup and 16.74 tons from styrene, a hazardous air pollutant (HAP). Since the styrene or HAP emissions is over 10 tons per year, the facility is subject to the Title V requirements contained in OAC Chapters 3745-77, 3745-78 and 3745-79. A Title V application must be submitted to the Ohio EPA, Central Office within one year of the installation of the equipment described in this permit and start-up of the operation.

### **B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Pultrusion Unit No. 1, with a 99.9% efficient fabric filter for dust collection.	OAC Rule 3745-31-05(A)(3)	<p>Organic Compound emissions, excluding emissions from clean-up shall not exceed: 0.27 lb/hr, 6.48 lbs/day, and 1.18 tons/year.</p> <p>Organic Compound emissions, including emissions from clean-up shall not exceed: 7.0 lbs/day and 1.27 tons/year.</p> <p>See Sections A.I.2.a, A.I.2.b, and A.I.2.c.</p> <p>The requirements of this rule also include compliance with OAC Rule 3745-31-28, as specified in Section A.I.2.c.</p> <p>Particulates emissions shall not exceed: 0.004 lb/hr and 0.02 ton/year.</p> <p>Visible Emissions (VE) from this emissions unit shall not exceed 5% opacity as a 6-minute average, except as specified by rule.</p>
	OAC Rule 3745-21-07(G)(2)	<p>The requirements of this rule are less stringent than the organic chemical emission limit established pursuant to OAC Rule 3745-31-05(A)(3).</p>

OAC Rule 3745-31-28	This emissions unit must comply with the MACT determination requirements as specified in Section A.I.2.c.
OAC Rule 3745-17-07(A)	The requirements of this rule are less stringent than the visible particulate emission limit established pursuant to OAC Rule 3745-31-05(A)(3).
OAC Rule 3745-17-11	The requirements of this rule are less stringent than the particulate emission limit established pursuant to OAC Rule 3745-31-05(A)(3).

## 2. Additional Terms and Conditions

- 2.a** The organic compound emissions from the pultrusion operations consist of styrene, a photochemically reactive material as defined in OAC Rule 3745-21-01(C)(5).
- 2.b** The politen mix shall be delivered to this emissions unit by pumping or gravity feed through a pipe line (closed system).
- 2.c** Permittee shall install and operate a wet area enclosure with resin drip collection to reduce total styrene emissions by at least 60 weight percent, per the requirements contained in 63.5830 of the proposed 40 CFR 63, subpart WWWW (August 2, 2001). These requirements for this pultrusion unit, with no pre-mold heat and no direct die injection, are as follows:
- i. The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die.
  - ii. The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
  - iii. The enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
  - iv. The enclosure can only be constructed high enough to clear the highest part of the pultrusion line that must be inside the enclosure.
  - v. The total open area of the enclosure must not exceed 2 (two) times the cross sectional area of the puller window. All areas which are open need to be included in the total open area calculation with the exception of access panels, door and/or hatches that are part of the enclosure. The area which is displaced by entering

reinforcement or exiting product is considered open. Areas covered by brush covers are considered closed.

- vi. Open areas for level control devices, monitoring devices, agitation shafts, and/or fill hoses must have no more than 1.0 inch clearance.
- vii. Any access panels, doors, and/or hatches that are part of the enclosure must close tightly to avoid vapor leakage. Damages access panels, doors, and/or hatches that allow vapor leakage must be replaced.
- viii. The wet area enclosure shall not be removed from the pultrusion line and/or the access panels, doors, and/or hatches to the wet area enclosure must remain closed whenever politen mix or resin is in the bath, except for the following periods of time:
  - (a.) 30 minutes per any 8 hour shift
  - (b.) 45 minutes per any 12 hour shift.
- ix. No fans, blowers, and/or air lines shall be allowed within the enclosure. The enclosure must not be ventilated.
- x. Resin drip is captured within the enclosure and returned by gravity to the resin bath.

**2.d** On August 2, 2001, U.S. EPA proposed the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW. When the NESHAP is promulgated, the facility will be subject as an existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

- i. Initial Notification: Shall be submitted no later than 120 days after the effective date of the standard or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2). See Section A.IV.4.
- ii. Notification of Compliance status: Shall be submitted in accordance with 40 CFR 63.9(h) within 30 days after completion of the relevant compliance demonstration. See Section A.IV.5.
- iii. If the requirements of the final MACT standard are different from those specified in this permit, then the permittee shall submit an application for a PTI modification within 18 months after promulgation of this NESHAP standard.

## II. Operational Restrictions

- 1. The particulate emissions from the dry cutting operations of this emissions unit will be controlled by a dust collector (which is shared with pultrusion unit #2) with an operating capture efficiency of 99.9%, whenever this emissions unit is in operation. The vacuum at this emissions

unit (also shared with pultrusion unit #2) which draws the dust into the dust collector will also be in operation, whenever this emissions unit is in operation.

2. The use of photochemically reactive cleanup materials is prohibited.

### III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each politen mix employed and each cleanup material employed;
  - b. an identification of whether or not each cleanup material employed is a photochemically reactive material;
  - c. the weight of each politen mix employed, in pounds;
  - d. the styrene content of each politen mix employed, in percent by weight;
  - e. the total organic compound (OC) emission rate for all politen mixes employed, calculated as required in Section A.V.1.a;
  - f. the actual number of hours that the emissions unit was in operation;
  - g. the average hourly OC emission rate for all politen mixes employed, calculated per Sections A.V.1.a. & b;
  - h. the volume, in gallons, of each cleanup material applied;
  - i. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in Section A.III.6;
  - j. if a credit for recovered cleanup/purge material is used, the volume of this material added to the recovery container, in gallons per day; and the adjusted volume of cleanup/purge materials employed, calculate by subtracting the volume of the recovered cleanup/purge material added to the recovery container, from the volume of the total cleanup/purge material applied (h), in gallons per day (adjusted);

- k. the OC content of each cleanup material applied, in pounds per gallon;
  - l. the total OC emissions from cleanup materials, calculated using the summation of all cleanup materials applied (h) or the adjusted amount after recovery (j), calculated as required in Section A.V.1.d.i, in pounds per day;
  - m. the total OC emission rate for all politen mixes employed and all cleanup materials, in pounds per day, calculated as required in Section A.V.1.d.ii;
  - n. an identification of any time periods when the particulate control filter was not in service when the emissions unit was in operation;
  - o. the total amount of product processed at this emissions unit, in pounds; and
  - p. any observance of emissions from the dust collector stack.
2. Except as otherwise provided in this section, the permittee shall perform inspections of this emissions unit in accordance with the following frequencies:
- |                               |   |
|-------------------------------|---|
| Process unit:                 | closed delivery of politen mix to the pultrusion unit either by pumping or gravity feed through a pipe line |
| Minimum inspection frequency: | daily when the unit is in operation   |
| Process unit:                 | wet area enclosure with resin drip collection   |
| Minimum inspection frequency: | daily when the unit is in operation   |
3. The purpose of the inspections is to ensure that the methods to reduce styrene emissions are employed. The inspections shall be performed during representative, normal operation conditions.
4. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain daily records of the following information:
- a. the date and reason any required inspection was not performed; and
  - b. the date and duration that the wet area enclosure (and/or access panels, doors, hatches) is/are open and politen mix is present in the bath.
6. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup and purge materials, and the recovery container serving this emissions unit:

- a. the date the materials from the recovery container were shipped off site; and
- b. the number of gallons or pounds of materials from the recovery container shipped off site.

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 0.27 pounds per hour, and the actual average hourly OC emissions for each such day;
  - b. an identification of each day during which the OC emissions from this emissions unit exceeded 6.48 pounds per day, and the actual OC emissions for each such day;
  - c. an identification of each day during which the OC emissions from the politen mix and the cleanup materials exceeded 7.0 per day, and the actual OC emissions for each such day;
  - d. an identification of each day during which any photochemically reactive cleanup materials were employed;
  - e. an identification of each day during which an inspection was not performed by the required frequency;
  - f. an identification of the date and duration of time that the wet area enclosure was removed or the access panels, doors, and/or hatches was/were open when politen mix or resin was present in the bath, for a any period of time exceeding 30 minutes per any 8-hours shift or 45 minutes per any 12-hour shift; and
  - g. an identification of each day during which emissions from the dust collector stack was observed.
2. The permittee shall notify the Northeast District Office in writing of any daily record showing that the vacuum and particulate control filter were not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Northeast District Office within 30 days after the event occurs.
3. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.
4. The permittee shall submit to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) an Initial Notification to be submitted no later than 120 days after the

effective date of 40 CFR 63 subpart WWWW, or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2).

5. The permittee shall submit a Notification of Compliance status report, in accordance with 40 CFR 63.9(h), to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) within 30 days after completion of the relevant compliance demonstration. In accordance to Table 8 of the proposed MACT, the Notice of Compliance shall include a certified statement that this pultrusion unit is using a wet area enclosure that meets the criteria of 63.5830.

## V. Testing Requirements

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

- a. Emission Limitation:

6.48 lbs OC/day, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in Section A.III.1.c & d. Compliance shall be determined based upon the following equation:

$$EM(OC) = \text{summation of } (W_i \times OC_i) \times EF(OC) \times (0.40)$$

where:

$EM(OC)$  = OC emissions as styrene from the politen mix operations, in pounds per day.

$W_i$  = the weight of politen mix  $i$  employed, in pounds per day.

$OC_i$  = the styrene content of politen mix  $i$ , in percent by weight.

$EF(OC)$  = the emissions factor for OC emissions, which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88)).

0.40 = a factor that accounts for the 60 weight percent reduction of styrene by compliance with Section A.I.2.c.

b. Emission Limitation:

0.27 lbs OC/hr, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined by dividing the daily OC emissions, as calculated in Section A.V.1.a, by the number of actual number of hours that the emissions unit was in operation, as recorded in Section A.III.1.f.

If required, the permittee shall demonstrate compliance with this emission limitation or the 60% by weight styrene emissions reduction through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 18, 25 or 25A, and/or 40 CFR Part 51, Appendix M, Methods 204 A through F as appropriate, or an equivalent alternate method as approved by Ohio EPA.

c. Emission Limitation:

1.18 tons OC/year, excluding emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1, and adding the daily OC emissions from politen mix, as recorded each day in Section A.III.1.e and calculated per Section A.V.1.a, from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

d. Emission Limitation:

7.0 lbs OC/day, including emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1.

i. Determination of OC emissions for all cleanup materials shall be determined based upon the following equations:

$$EC(OC) = \text{summation of } (V_i \times OC_i)$$

where:

EC(OC) = OC emissions from the cleanup materials, in pounds per day.

$V_i$  = the volume of cleanup material applied, as specified in Section A.III.1.h or j (adjusted), in gallons per day.

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

- ii. The total daily OC emissions from this emissions unit, recorded in Section A.III.1.m, shall be the sum of the emissions from the politen mixes, calculated in Section A.V.1.a, and the emissions from cleanup materials as calculated above (Section A.V.1.d.i).

- e. Emission Limitation:

1.27 tons OC/year, including emissions from cleanup.

Applicable Compliance Method:

Compliance with the annual OC limit for this emissions unit shall be determined at the end of each year, by adding the daily emissions, calculated as required in Sections A.V.1.d.ii and as recorded in Section A.III.1.m, for each day of the year, and dividing this total by 2000 pounds/ton.

- f. Emission Limitation:

0.004 lb PE/hr

Applicable Compliance Method:

Compliance shall be based upon the following equation:

$$E(PE) = P \times EF(PE) \times (1-CE) \text{ divided by } H$$

where:

$P$  = amount, in pounds, of product produced in this pultrusion unit, as specified in Section A.III.1.o.

$EF(PE) = 0.01$ . Application reports an 0.1 inch cut per 10 liner inch of product. PE generated is therefore equal to 0.1 inch/10 inch, or 1% of the product weight.

$CE$  = efficiency of PE control device is 99.9%, or 0.999, as reported in the permit application.

$H$  = Number of hours that the pultrusion unit was in operation, as specified in Section A.III.1.f.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

g. Emission Limitation:

0.4 ton PE/year

Applicable Compliance Method:

To determine the annual PE rate, the hourly rate as determined from A.V.1.f shall be multiplied by the summation of the actual operation hours each day, as required in Section A.III.1.f, for the calendar year, and the product divided by 2000 lbs/ton.

h. Emission Limitation:

5% opacity of visible PE, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

## **VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Pultrusion Unit No. 1, with a 99.9% efficient fabric filter for dust collection.	None	None

2. **Additional Terms and Conditions**

- 2.a None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Pultrusion Unit No. 2, with a 99.9% efficient fabric filter for dust collection.	OAC Rule 3745-31-05(A)(3)	<p>Organic Compound emissions, excluding emissions from clean-up shall not exceed: 0.27 lb/hr, 6.48 lbs/day, and 1.18 tons/year.</p> <p>Organic Compound emissions, including emissions from clean-up shall not exceed: 7.0 lbs/day and 1.27 tons/year.</p> <p>See Sections A.I.2.a, A.I.2.b, and A.I.2.c.</p> <p>The requirements of this rule also include compliance with OAC Rule 3745-31-28, as specified in Section A.I.2.c.</p> <p>Particulates emissions shall not exceed: 0.004 lb/hr and 0.02 ton/year.</p>
	OAC Rule 3745-21-07(G)(2)	Visible Emissions (VE) from this emissions unit shall not exceed 5% opacity as a 6-minute average, except as specified by rule.
	OAC Rule 3745-31-28	The requirements of this rule are less stringent than the organic chemical emission limit established pursuant to OAC Rule 3745-31-05(A)(3).

OAC Rule 3745-17-07(A)	This emissions unit must comply with the MACT determination requirements as specified in Section A.I.2.c.
OAC Rule 3745-17-11	The requirements of this rule are less stringent than the visible particulate emission limit established pursuant to OAC Rule 3745-31-05(A)(3).  The requirements of this rule are less stringent than the particulate emission limit established pursuant to OAC Rule 3745-31-05(A)(3).

## 2. Additional Terms and Conditions

- 2.a** The organic compound emissions from the pultrusion operations consist of styrene, a photochemically reactive material as defined in OAC Rule 3745-21-01(C)(5).
- 2.b** The politen mix shall be delivered to this emissions unit by pumping or gravity feed through a pipe line (closed system).
- 2.c** Permittee shall install and operate a wet area enclosure with resin drip collection to reduce total styrene emissions by at least 60 weight percent, per the requirements contained in 63.5830 of the proposed 40 CFR 63, subpart WWWW (August 2, 2001).
- i. The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die.
  - ii. The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
  - iii. The enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
  - iv. The enclosure can only be constructed high enough to clear the highest part of the pultrusion line that must be inside the enclosure.
  - v. The total open area of the enclosure must not exceed 2 (two) times the cross sectional area of the puller window. All areas which are open need to be included in the total open area calculation with the exception of access panels, door and/or hatches that are part of the enclosure. The area which is displaced by entering reinforcement or exiting product is considered open. Areas covered by brush covers are considered closed.

- vi. Open areas for level control devices, monitoring devices, agitation shafts, and/or fill hoses must have no more than 1.0 inch clearance.
- vii. Any access panels, doors, and/or hatches that are part of the enclosure must close tightly to avoid vapor leakage. Damages access panels, doors, and/or hatches that allow vapor leakage must be replaced.
- viii. The wet area enclosure shall not be removed from the pultrusion line and/or the access panels, doors, and/or hatches to the wet area enclosure must remain closed whenever politen mix or resin is in the bath, except for the following periods of time:
  - (a.) 30 minutes per any 8 hour shift
  - (b.) 45 minutes per any 12 hour shift.
- ix. No fans, blowers, and/or air lines shall be allowed within the enclosure. The enclosure must not be ventilated.
- x. Resin drip is captured within the enclosure and returned by gravity to the resin bath.

**2.d** On August 2, 2001 , U.S. EPA proposed the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW. When the NESHAP is promulgated, the facility will be subject as an existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

- i. Initial Notification: Shall be submitted no later than 120 days after the effective date of the standard or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2). See Section A.IV.4.
- ii. Notification of Compliance status: Shall be submitted in accordance with 40 CFR 63.9(h) within 30 days after completion of the relevant compliance demonstration. See Section A.IV.5.
- iii. If the requirements of the final MACT standard are different from those specified in this permit, then the permittee shall submit an application for a PTI modification within 18 months after promulgation of this NESHAP standard.

## **II. Operational Restrictions**

1. The particulate emissions from the dry cutting operations of this emissions unit will be controlled by a dust collector (which is shared with pultrusion unit #1) with an operating capture efficiency of 99.9%, whenever this emissions unit is in operation. The vacuum at this emissions unit (also shared with pultrusion unit #1) which draws the dust into the dust collector will also be in operation, whenever this emissions unit is in operation.
2. The use of photochemically reactive cleanup materials is prohibited.

### III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each politen mix employed and each cleanup material employed;
  - b. an identification of whether or not each cleanup material employed is a photochemically reactive material;
  - c. the weight of each politen mix employed, in pounds;
  - d. the styrene content of each politen mix employed, in percent by weight;
  - e. the total organic compound (OC) emission rate for all politen mixes employed, calculated as required in Section A.V.1.a;
  - f. the actual number of hours that the emissions unit was in operation;
  - g. the average hourly OC emission rate for all politen mixes employed, calculated per Sections A.V.1.a. & b;
  - h. the volume, in gallons, of each cleanup material applied;
  - i. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in Section A.III.6;
  - j. if a credit for recovered cleanup/purge material is used, the volume of this material added to the recovery container, in gallons per day; and the adjusted volume of cleanup/purge materials employed, calculate by subtracting the volume of the recovered cleanup/purge material added to the recovery container, from the volume of the total cleanup/purge material applied (h), in gallons per day (adjusted);
  - k. the OC content of each cleanup material applied, in pounds per gallon;
  - l. the total OC emissions from cleanup materials, calculated using the summation of all cleanup materials applied (h) or the adjusted amount after recovery (j), calculated as required in Section A.V.1.d.i, in pounds per day;
  - m. the total OC emission rate for all politen mixes employed and all cleanup materials, in pounds per day, calculated as required in Section A.V.1.d.ii;

- n. an identification of any time periods when the particulate control filter was not in service when the emissions unit was in operation;
  - o. the total amount of product processed at this emissions unit, in pounds; and
  - p. any observance of emissions from the dust collector stack.
2. Except as otherwise provided in this section, the permittee shall perform inspections of this emissions unit in accordance with the following frequencies:
- |                               |   |
|-------------------------------|---|
| Process unit:                 | closed delivery of politen mix to the pultrusion unit either by pumping or gravity feed through a pipe line |
| Minimum inspection frequency: | daily when the unit is in operation   |
| Process unit:                 | wet area enclosure with resin drip collection   |
| Minimum inspection frequency: | daily when the unit is in operation   |
3. The purpose of the inspections is to ensure that the methods to reduce styrene emissions are employed. The inspections shall be performed during representative, normal operation conditions.
4. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain daily records of the following information:
- a. the date and reason any required inspection was not performed; and
  - b. the date and duration that the wet area enclosure (and/or access panels, doors, hatches) is/are open and politen mix is present in the bath.
6. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup and purge materials, and the recovery container serving this emissions unit:
- a. the date the materials from the recovery container were shipped off site; and
  - b. the number of gallons or pounds of materials from the recovery container shipped off site.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 0.27 pounds per hour, and the actual average hourly OC emissions for each such day;
  - b. an identification of each day during which the OC emissions from this emissions unit exceeded 6.48 pounds per day, and the actual OC emissions for each such day;
  - c. an identification of each day during which the OC emissions from the politen mix and the cleanup materials exceeded 7.0 per day, and the actual OC emissions for each such day;
  - d. an identification of each day during which any photochemically reactive cleanup materials were employed;
  - e. an identification of each day during which an inspection was not performed by the required frequency;
  - f. an identification of the date and duration of time that the wet area enclosure was removed or the access panels, doors, and/or hatches was/were open when politen mix or resin was present in the bath, for a any period of time exceeding 30 minutes per any 8-hours shift or 45 minutes per any 12-hour shift; and
  - g. an identification of each day during which emissions from the dust collector stack was observed.
2. The permittee shall notify the Northeast District Office in writing of any daily record showing that the vacuum and particulate control filter were not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Northeast District Office within 30 days after the event occurs.
3. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.
4. The permittee shall submit to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) an Initial Notification to be submitted no later than 120 days after the effective date of 40 CFR 63 subpart WWWW, or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2).
5. The permittee shall submit a Notification of Compliance status report, in accordance with 40 CFR 63.9(h), to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) within 30 days after completion of the relevant compliance demonstration. In accordance to Table 8 of the proposed MACT, the Notice of Compliance shall include a certified statement that this pultrusion unit is using a wet area enclosure that meets the criteria of 63.5830.

## V. Testing Requirements

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

- a. Emission Limitation:

6.48 lbs OC/day, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in Section A.III.1.c & d. Compliance shall be determined based upon the following equation:

$$EM(OC) = \text{summation of } (W_i \times OC_i) \times EF(OC) \times (0.40)$$

where:

$EM(OC)$  = OC emissions as styrene from the politen mix operations, in pounds per day.

$W_i$  = the weight of politen mix  $i$  employed, in pounds per day.

$OC_i$  = the styrene content of politen mix  $i$ , in percent by weight.

$EF(OC)$  = the emissions factor for OC emissions, which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88)).

0.40 = a factor that accounts for the 60 weight percent reduction of styrene by compliance with Section A.I.2.c.

- b. Emission Limitation:

0.27 lbs OC/hr, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined by dividing the daily OC emissions, as calculated in Section A.V.1.a, by the number of actual number of hours that the emissions unit was in operation, as recorded in Section A.III.1.f.

If required, the permittee shall demonstrate compliance with this emission limitation or the 60% by weight styrene emissions reduction through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 18, 25 or 25A, and/or 40 CFR Part 51, Appendix M, Methods 204 A through F as appropriate, or an equivalent alternate method as approved by Ohio EPA.

c. Emission Limitation:

1.18 tons OC/year, excluding emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1, and adding the daily OC emissions from politen mix, as recorded each day in Section A.III.1.e and calculated per Section A.V.1.a, from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

d. Emission Limitation:

7.0 lbs OC/day, including emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1.

i. Determination of OC emissions for all cleanup materials shall be determined based upon the following equations:

$$EC(OC) = \text{summation of } (V_i \times OC_i)$$

where:

$EC(OC)$  = OC emissions from the cleanup materials, in pounds per day.

$V_i$  = the volume of cleanup material applied, as specified in Section A.III.1.h or j (adjusted), in gallons per day.

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

ii. The total daily OC emissions from this emissions unit, recorded in Section A.III.1.m, shall be the sum of the emissions from the politen mixes, calculated in Section A.V.1.a, and the emissions from cleanup materials as calculated above (Section A.V.1.d.i).

e. Emission Limitation:

1.27 tons OC/year, including emissions from cleanup.

Applicable Compliance Method:

Compliance with the annual OC limit for this emissions unit shall be determined at the end of each year, by adding the daily emissions, calculated as required in Sections A.V.1.d.ii

and as recorded in Section A.III.1.m, for each day of the year, and dividing this total by 2000 pounds/ton.

f. Emission Limitation:

0.004 lb PE/hr

Applicable Compliance Method:

Compliance shall be based upon the following equation:

$$E(PE) = P \times EF(PE) \times (1-CE) \text{ divided by } H$$

where:

P = amount, in pounds, of product produced in this pultrusion unit, as specified in Section A.III.1.o.

EF(PE) = 0.01. Application reports an 0.1 inch cut per 10 liner inch of product. PE generated is therefore equal to 0.1 inch/10 inch, or 1% of the product weight.

CE = efficiency of PE control device is 99.9%, or 0.999, as reported in the permit application.

H = Number of hours that the pultrusion unit was in operation, as specified in Section A.III.1.f.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

g. Emission Limitation:

0.4 ton PE/year

Applicable Compliance Method:

To determine the annual PE rate, the hourly rate as determined from A.V.1.f shall be multiplied by the summation of the actual operation hours each day, as required in Section A.III.1.f, for the calendar year, and the product divided by 2000 lbs/ton.

h. Emission Limitation:

5% opacity of visible PE, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - Pultrusion Unit No. 2, with a 99.9% efficient fabric filter for dust collection.	None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - Pultrusion Unit No. 3, with no air pollution control equipment.	OAC Rule 3745-31-05(A)(3)	Organic Compound emissions, excluding emissions from clean-up shall not exceed: 0.27 lb/hr, 6.48 lbs/day, and 1.18 tons/year.
		Organic Compound emissions, including emissions from clean-up shall not exceed: 7.0 lbs/day and 1.27 tons/year.
		See Sections A.I.2.a, A.I.2.b, and A.I.2.c.
		The requirements of this rule also include compliance with OAC Rule 3745-31-28, as specified in Section A.I.2.c.
	OAC Rule 3745-21-07(G)(2)	The requirements of this rule are less stringent than the organic chemical emission limit established pursuant to OAC Rule 3745-31-05(A)(3).
	OAC Rule 3745-31-28	This emissions unit must comply with the MACT determination requirements as specified in Section A.I.2.c.

**2. Additional Terms and Conditions**

- 2.a The organic compound emissions from the pultrusion operations consist of styrene, a photochemically reactive material as defined in OAC Rule 3745-21-01(C)(5).
- 2.b The politen mix shall be delivered to this emissions unit by pumping or gravity feed through a pipe line (closed system).

- 2.c** Permittee shall install and operate a wet area enclosure with resin drip collection to reduce total styrene emissions by at least 60 weight percent, per the requirements contained in 63.5830 of the proposed 40 CFR 63, subpart WWWW (August 2, 2001).
- i. The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die.
  - ii. The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
  - iii. The enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
  - iv. The enclosure can only be constructed high enough to clear the highest part of the pultrusion line that must be inside the enclosure.
  - v. The total open area of the enclosure must not exceed 2 (two) times the cross sectional area of the puller window. All areas which are open need to be included in the total open area calculation with the exception of access panels, door and/or hatches that are part of the enclosure. The area which is displaced by entering reinforcement or exiting product is considered open. Areas covered by brush covers are considered closed.
  - vi. Open areas for level control devices, monitoring devices, agitation shafts, and/or fill hoses must have no more than 1.0 inch clearance.
  - vii. Any access panels, doors, and/or hatches that are part of the enclosure must close tightly to avoid vapor leakage. Damages access panels, doors, and/or hatches that allow vapor leakage must be replaced.
  - viii. The wet area enclosure shall not be removed from the pultrusion line and/or the access panels, doors, and/or hatches to the wet area enclosure must remain closed whenever politen mix or resin is in the bath, except for the following periods of time:
    - (a.) 30 minutes per any 8 hour shift
    - (b.) 45 minutes per any 12 hour shift.
  - ix. No fans, blowers, and/or air lines shall be allowed within the enclosure. The enclosure must not be ventilated.
  - x. Resin drip is captured within the enclosure and returned by gravity to the resin bath.
- 2.d** On August 2, 2001 , U.S. EPA proposed the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW. When the NESHAP is promulgated, the facility will be subject as an

existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

- i. Initial Notification: Shall be submitted no later than 120 days after the effective date of the standard or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2). See Section A.IV.4.
- ii. Notification of Compliance status: Shall be submitted in accordance with 40 CFR 63.9(h) within 30 days after completion of the relevant compliance demonstration. See Section A.IV.5.
- iii. If the requirements of the final MACT standard are different from those specified in this permit, then the permittee shall submit an application for a PTI modification within 18 months after promulgation of this NESHAP standard.

## **II. Operational Restrictions**

1. The use of photochemically reactive cleanup materials is prohibited.
2. Product to be cut by a wet cut or mold terminate, not to produce particulate emissions.

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

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each politen mix employed and each cleanup material employed;
  - b. an identification of whether or not each cleanup material employed is a photochemically reactive material;
  - c. the weight of each politen mix employed, in pounds;
  - d. the styrene content of each politen mix employed, in percent by weight;
  - e. the total organic compound (OC) emission rate for all politen mixes employed, calculated as required in Section A.V.1.a;
  - f. the actual number of hours that the emissions unit was in operation;
  - g. the average hourly OC emission rate for all politen mixes employed, calculated per Sections A.V.1.a. & b;
  - h. the volume, in gallons, of each cleanup material applied;

- i. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in Section A.III.6;
  - j. if a credit for recovered cleanup/purge material is used, the volume of this material added to the recovery container, in gallons per day; and the adjusted volume of cleanup/purge materials employed, calculate by subtracting the volume of the recovered cleanup/purge material added to the recovery container, from the volume of the total cleanup/purge material applied (h), in gallons per day (adjusted);
  - k. the OC content of each cleanup material applied, in pounds per gallon;
  - l. the total OC emissions from cleanup materials, calculated using the summation of all cleanup materials applied (h) or the adjusted amount after recovery (j), calculated as required in Section A.V.1.d.i, in pounds per day; and
  - m. the total OC emission rate for all politen mixes employed and all cleanup materials, in pounds per day, calculated as required in Section A.V.1.d.ii.
2. Except as otherwise provided in this section, the permittee shall perform inspections of this emissions unit in accordance with the following frequencies:
- |                               |   |
|-------------------------------|---|
| Process unit:                 | closed delivery of politen mix to the pultrusion unit either by pumping or gravity feed through a pipe line |
| Minimum inspection frequency: | daily when the unit is in operation   |
| Process unit:                 | wet area enclosure with resin drip collection   |
| Minimum inspection frequency: | daily when the unit is in operation   |
3. The purpose of the inspections is to ensure that the methods to reduce styrene emissions are employed. The inspections shall be performed during representative, normal operation conditions.
4. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain daily records of the following information:
- a. the date and reason any required inspection was not performed; and
  - b. the date and duration that the wet area enclosure (and/or access panels, doors, hatches) is/are open and politen mix is present in the bath.

6. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup and purge materials, and the recovery container serving this emissions unit:
  - a. the date the materials from the recovery container were shipped off site; and
  - b. the number of gallons or pounds of materials from the recovery container shipped off site.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 0.27 pounds per hour, and the actual average hourly OC emissions for each such day;
  - b. an identification of each day during which the OC emissions from this emissions unit exceeded 6.48 pounds per day, and the actual OC emissions for each such day;
  - c. an identification of each day during which the OC emissions from the politen mix and the cleanup materials exceeded 7.0 per day, and the actual OC emissions for each such day;
  - d. an identification of each day during which any photochemically reactive cleanup materials were employed;
  - e. an identification of each day during which an inspection was not performed by the required frequency; and
  - f. an identification of the date and duration of time that the wet area enclosure was removed or the access panels, doors, and/or hatches was/were open when politen mix or resin was present in the bath, for a any period of time exceeding 30 minutes per any 8-hours shift or 45 minutes per any 12-hour shift.
2. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.
3. The permittee shall submit to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) an Initial Notification to be submitted no later than 120 days after the effective date of 40 CFR 63 subpart WWW, or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2).
4. The permittee shall submit a Notification of Compliance status report, in accordance with 40 CFR 63.9(h), to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control,

Central Office) within 30 days after completion of the relevant compliance demonstration. In accordance to Table 8 of the proposed MACT, the Notice of Compliance shall include a certified statement that this pultrusion unit is using a wet area enclosure that meets the criteria of 63.5830.

## V. Testing Requirements

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

- a. Emission Limitation:

6.48 lbs OC/day, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in Section A.III.1.c & d. Compliance shall be determined based upon the following equation:

$$EM(OC) = \text{summation of } (W_i \times OC_i) \times EF(OC) \times (0.40)$$

where:

$EM(OC)$  = OC emissions as styrene from the politen mix operations, in pounds per day.

$W_i$  = the weight of politen mix  $i$  employed, in pounds per day.

$OC_i$  = the styrene content of politen mix  $i$ , in percent by weight.

$EF(OC)$  = the emissions factor for OC emissions, which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88)).

0.40 = a factor that accounts for the 60 weight percent reduction of styrene by compliance with Section A.I.2.c.

- b. Emission Limitation:

0.27 lbs OC/hr, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined by dividing the daily OC emissions, as calculated in Section A.V.1.a, by the number of actual number of hours that the emissions unit was in operation, as recorded in Section A.III.1.f.

If required, the permittee shall demonstrate compliance with this emission limitation or the 60% by weight styrene emissions reduction through emission tests performed in

accordance with 40 CFR Part 60, Appendix A, Method 18, 25 or 25A, and/or 40 CFR Part 51, Appendix M, Methods 204 A through F as appropriate, or an equivalent alternate method as approved by Ohio EPA.

c. Emission Limitation:

1.18 tons OC/year, excluding emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1, and adding the daily OC emissions from politen mix, as recorded each day in Section A.III.1.e and calculated per Section A.V.1.a, from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

d. Emission Limitation:

7.0 lbs OC/day, including emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1.

i. Determination of OC emissions for all cleanup materials shall be determined based upon the following equations:

$$EC(OC) = \text{summation of } (V_i \times OC_i)$$

where:

$EC(OC)$  = OC emissions from the cleanup materials, in pounds per day.

$V_i$  = the volume of cleanup material applied, as specified in Section A.III.1.h or j (adjusted), in gallons per day.

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

ii. The total daily OC emissions from this emissions unit, recorded in Section A.III.1.m, shall be the sum of the emissions from the politen mixes, calculated in Section A.V.1.a, and the emissions from cleanup materials as calculated above (Section A.V.1.d.i).

e. Emission Limitation:

1.27 tons OC/year, including emissions from cleanup.

Applicable Compliance Method:

Compliance with the annual OC limit for this emissions unit shall be determined at the end of each year, by adding the daily emissions, calculated as required in Sections A.V.1.d.ii and as recorded in Section A.III.1.m, for each day of the year, and dividing this total by 2000 pounds/ton.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - Pultrusion Unit No. 3, with no air pollution control equipment.	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Pultrusion Unit No. 4, with no air pollution control equipment.	OAC Rule 3745-31-05(A)(3)	Organic Compound emissions, excluding emissions from clean-up shall not exceed: 0.27 lb/hr, 6.48 lbs/day, and 1.18 tons/year.  Organic Compound emissions, including emissions from clean-up shall not exceed: 7.0 lbs/day and 1.27 tons/year.  See Sections A.I.2.a, A.I.2.b, and A.I.2.c.  The requirements of this rule also include compliance with OAC Rule 3745-31-28, as specified in Section A.I.2.c.
	OAC Rule 3745-21-07(G)(2)	The requirements of this rule are less stringent than the organic chemical emission limit established pursuant to OAC Rule 3745-31-05(A)(3).
	OAC Rule 3745-31-28	This emissions unit must comply with the MACT determination requirements as specified in Section A.I.2.c.

**2. Additional Terms and Conditions**

- 2.a The organic compound emissions from the pultrusion operations consist of styrene, a photochemically reactive material as defined in OAC Rule 3745-21-01(C)(5).
- 2.b The politen mix shall be delivered to this emissions unit by pumping or gravity feed through a pipe line (closed system).

- 2.c** Permittee shall install and operate a wet area enclosure with resin drip collection to reduce total styrene emissions by at least 60 weight percent, per the requirements contained in 63.5830 of the proposed 40 CFR 63, subpart WWWW (August 2, 2001).
- i. The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die.
  - ii. The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
  - iii. The enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
  - iv. The enclosure can only be constructed high enough to clear the highest part of the pultrusion line that must be inside the enclosure.
  - v. The total open area of the enclosure must not exceed 2 (two) times the cross sectional area of the puller window. All areas which are open need to be included in the total open area calculation with the exception of access panels, door and/or hatches that are part of the enclosure. The area which is displaced by entering reinforcement or exiting product is considered open. Areas covered by brush covers are considered closed.
  - vi. Open areas for level control devices, monitoring devices, agitation shafts, and/or fill hoses must have no more than 1.0 inch clearance.
  - vii. Any access panels, doors, and/or hatches that are part of the enclosure must close tightly to avoid vapor leakage. Damages access panels, doors, and/or hatches that allow vapor leakage must be replaced.
  - viii. The wet area enclosure shall not be removed from the pultrusion line and/or the access panels, doors, and/or hatches to the wet area enclosure must remain closed whenever politen mix or resin is in the bath, except for the following periods of time:
    - (a.) 30 minutes per any 8 hour shift
    - (b.) 45 minutes per any 12 hour shift.
  - ix. No fans, blowers, and/or air lines shall be allowed within the enclosure. The enclosure must not be ventilated.
  - x. Resin drip is captured within the enclosure and returned by gravity to the resin bath.
- 2.d** On August 2, 2001 , U.S. EPA proposed the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW. When the NESHAP is promulgated, the facility will be subject as an

existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

- i. Initial Notification: Shall be submitted no later than 120 days after the effective date of the standard or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2). See Section A.IV.4.
- ii. Notification of Compliance status: Shall be submitted in accordance with 40 CFR 63.9(h) within 30 days after completion of the relevant compliance demonstration. See Section A.IV.5.
- iii. If the requirements of the final MACT standard are different from those specified in this permit, then the permittee shall submit an application for a PTI modification within 18 months after promulgation of this NESHAP standard.

## **II. Operational Restrictions**

1. The use of photochemically reactive cleanup materials is prohibited.
2. Product to be cut by a wet cut or mold terminate, not to produce particulate emissions.

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

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each politen mix employed and each cleanup material employed;
  - b. an identification of whether or not each cleanup material employed is a photochemically reactive material;
  - c. the weight of each politen mix employed, in pounds;
  - d. the styrene content of each politen mix employed, in percent by weight;
  - e. the total organic compound (OC) emission rate for all politen mixes employed, calculated as required in Section A.V.1.a;
  - f. the actual number of hours that the emissions unit was in operation;
  - g. the average hourly OC emission rate for all politen mixes employed, calculated per Sections A.V.1.a. & b;
  - h. the volume, in gallons, of each cleanup material applied;

- i. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in Section A.III.6;
  - j. if a credit for recovered cleanup/purge material is used, the volume of this material added to the recovery container, in gallons per day; and the adjusted volume of cleanup/purge materials employed, calculate by subtracting the volume of the recovered cleanup/purge material added to the recovery container, from the volume of the total cleanup/purge material applied (h), in gallons per day (adjusted);
  - k. the OC content of each cleanup material applied, in pounds per gallon;
  - l. the total OC emissions from cleanup materials, calculated using the summation of all cleanup materials applied (h) or the adjusted amount after recovery (j), calculated as required in Section A.V.1.d.i, in pounds per day; and
  - m. the total OC emission rate for all politen mixes employed and all cleanup materials, in pounds per day, calculated as required in Section A.V.1.d.ii.
2. Except as otherwise provided in this section, the permittee shall perform inspections of this emissions unit in accordance with the following frequencies:
- |                               |   |
|-------------------------------|---|
| Process unit:                 | closed delivery of politen mix to the pultrusion unit either by pumping or gravity feed through a pipe line |
| Minimum inspection frequency: | daily when the unit is in operation   |
| Process unit:                 | wet area enclosure with resin drip collection   |
| Minimum inspection frequency: | daily when the unit is in operation   |
3. The purpose of the inspections is to ensure that the methods to reduce styrene emissions are employed. The inspections shall be performed during representative, normal operation conditions.
4. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain daily records of the following information:
- a. the date and reason any required inspection was not performed; and
  - b. the date and duration that the wet area enclosure (and/or access panels, doors, hatches) is/are open and politen mix is present in the bath.

6. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup and purge materials, and the recovery container serving this emissions unit:
  - a. the date the materials from the recovery container were shipped off site; and
  - b. the number of gallons or pounds of materials from the recovery container shipped off site.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 0.27 pounds per hour, and the actual average hourly OC emissions for each such day;
  - b. an identification of each day during which the OC emissions from this emissions unit exceeded 6.48 pounds per day, and the actual OC emissions for each such day;
  - c. an identification of each day during which the OC emissions from the politen mix and the cleanup materials exceeded 7.0 per day, and the actual OC emissions for each such day;
  - d. an identification of each day during which any photochemically reactive cleanup materials were employed;
  - e. an identification of each day during which an inspection was not performed by the required frequency; and
  - f. an identification of the date and duration of time that the wet area enclosure was removed or the access panels, doors, and/or hatches was/were open when politen mix or resin was present in the bath, for a any period of time exceeding 30 minutes per any 8-hours shift or 45 minutes per any 12-hour shift.
2. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.
3. The permittee shall submit to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) an Initial Notification to be submitted no later than 120 days after the effective date of 40 CFR 63 subpart WWW, or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2).
4. The permittee shall submit a Notification of Compliance status report, in accordance with 40 CFR 63.9(h), to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control,

Central Office) within 30 days after completion of the relevant compliance demonstration. In accordance to Table 8 of the proposed MACT, the Notice of Compliance shall include a certified statement that this pultrusion unit is using a wet area enclosure that meets the criteria of 63.5830.

## V. Testing Requirements

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

- a. Emission Limitation:

6.48 lbs OC/day, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in Section A.III.1.c & d. Compliance shall be determined based upon the following equation:

$$EM(OC) = \text{summation of } (W_i \times OC_i) \times EF(OC) \times (0.40)$$

where:

$EM(OC)$  = OC emissions as styrene from the politen mix operations, in pounds per day.

$W_i$  = the weight of politen mix  $i$  employed, in pounds per day.

$OC_i$  = the styrene content of politen mix  $i$ , in percent by weight.

$EF(OC)$  = the emissions factor for OC emissions, which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88)).

0.40 = a factor that accounts for the 60 weight percent reduction of styrene by compliance with Section A.I.2.c.

- b. Emission Limitation:

0.27 lbs OC/hr, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined by dividing the daily OC emissions, as calculated in Section A.V.1.a, by the number of actual number of hours that the emissions unit was in operation, as recorded in Section A.III.1.f.

If required, the permittee shall demonstrate compliance with this emission limitation or the 60% by weight styrene emissions reduction through emission tests performed in

accordance with 40 CFR Part 60, Appendix A, Method 18, 25 or 25A, and/or 40 CFR Part 51, Appendix M, Methods 204 A through F as appropriate, or an equivalent alternate method as approved by Ohio EPA.

c. Emission Limitation:

1.18 tons OC/year, excluding emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1, and adding the daily OC emissions from politen mix, as recorded each day in Section A.III.1.e and calculated per Section A.V.1.a, from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

d. Emission Limitation:

7.0 lbs OC/day, including emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1.

i. Determination of OC emissions for all cleanup materials shall be determined based upon the following equations:

$$EC(OC) = \text{summation of } (V_i \times OC_i)$$

where:

$EC(OC)$  = OC emissions from the cleanup materials, in pounds per day.

$V_i$  = the volume of cleanup material applied, as specified in Section A.III.1.h or j (adjusted), in gallons per day.

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

ii. The total daily OC emissions from this emissions unit, recorded in Section A.III.1.m, shall be the sum of the emissions from the politen mixes, calculated in Section A.V.1.a, and the emissions from cleanup materials as calculated above (Section A.V.1.d.i).

e. Emission Limitation:

1.27 tons OC/year, including emissions from cleanup.

Applicable Compliance Method:

Compliance with the annual OC limit for this emissions unit shall be determined at the end of each year, by adding the daily emissions, calculated as required in Sections A.V.1.d.ii and as recorded in Section A.III.1.m, for each day of the year, and dividing this total by 2000 pounds/ton.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P004 - Pultrusion Unit No. 4, with no air pollution control equipment.	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P005 - Pultrusion Unit No. 5, with no air pollution control equipment.	OAC Rule 3745-31-05(A)(3)	<p>Organic Compound emissions, excluding emissions from clean-up shall not exceed: 0.27 lb/hr, 6.48 lbs/day, and 1.18 tons/year.</p> <p>Organic Compound emissions, including emissions from clean-up shall not exceed: 7.0 lbs/day and 1.27 tons/year.</p> <p>See Sections A.I.2.a, A.I.2.b, and A.I.2.c.</p> <p>The requirements of this rule also include compliance with OAC Rule 3745-31-28, as specified in Section A.I.2.c.</p>
	OAC Rule 3745-21-07(G)(2)	The requirements of this rule are less stringent than the organic chemical emission limit established pursuant to OAC Rule 3745-31-05(A)(3).
	OAC Rule 3745-31-28	This emissions unit must comply with the MACT determination requirements as specified in Section A.I.2.c.

**2. Additional Terms and Conditions**

- 2.a The organic compound emissions from the pultrusion operations consist of styrene, a photochemically reactive material as defined in OAC Rule 3745-21-01(C)(5).
- 2.b The politen mix shall be delivered to this emissions unit by pumping or gravity feed through a pipe line (closed system).

- 2.c** Permittee shall install and operate a wet area enclosure with resin drip collection to reduce total styrene emissions by at least 60 weight percent, per the requirements contained in 63.5830 of the proposed 40 CFR 63, subpart WWWW (August 2, 2001).
- i. The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die.
  - ii. The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
  - iii. The enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
  - iv. The enclosure can only be constructed high enough to clear the highest part of the pultrusion line that must be inside the enclosure.
  - v. The total open area of the enclosure must not exceed 2 (two) times the cross sectional area of the puller window. All areas which are open need to be included in the total open area calculation with the exception of access panels, door and/or hatches that are part of the enclosure. The area which is displaced by entering reinforcement or exiting product is considered open. Areas covered by brush covers are considered closed.
  - vi. Open areas for level control devices, monitoring devices, agitation shafts, and/or fill hoses must have no more than 1.0 inch clearance.
  - vii. Any access panels, doors, and/or hatches that are part of the enclosure must close tightly to avoid vapor leakage. Damages access panels, doors, and/or hatches that allow vapor leakage must be replaced.
  - viii. The wet area enclosure shall not be removed from the pultrusion line and/or the access panels, doors, and/or hatches to the wet area enclosure must remain closed whenever politen mix or resin is in the bath, except for the following periods of time:
    - (a.) 30 minutes per any 8 hour shift
    - (b.) 45 minutes per any 12 hour shift.
  - ix. No fans, blowers, and/or air lines shall be allowed within the enclosure. The enclosure must not be ventilated.
  - x. Resin drip is captured within the enclosure and returned by gravity to the resin bath.
- 2.d** On August 2, 2001 , U.S. EPA proposed the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW. When the NESHAP is promulgated, the facility will be subject as an

existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

- i. Initial Notification: Shall be submitted no later than 120 days after the effective date of the standard or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2). See Section A.IV.4.
- ii. Notification of Compliance status: Shall be submitted in accordance with 40 CFR 63.9(h) within 30 days after completion of the relevant compliance demonstration. See Section A.IV.5.
- iii. If the requirements of the final MACT standard are different from those specified in this permit, then the permittee shall submit an application for a PTI modification within 18 months after promulgation of this NESHAP standard.

## **II. Operational Restrictions**

1. The use of photochemically reactive cleanup materials is prohibited.
2. Product to be cut be a wet cut or mold terminate, not to produce particulate emissions.

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

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each politen mix employed and each cleanup material employed;
  - b. an identification of whether or not each cleanup material employed is a photochemically reactive material;
  - c. the weight of each politen mix employed, in pounds;
  - d. the styrene content of each politen mix employed, in percent by weight;
  - e. the total organic compound (OC) emission rate for all politen mixes employed, calculated as required in Section A.V.1.a;
  - f. the actual number of hours that the emissions unit was in operation;
  - g. the average hourly OC emission rate for all politen mixes employed, calculated per Sections A.V.1.a. & b;
  - h. the volume, in gallons, of each cleanup material applied;

- i. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in Section A.III.6;
  - j. if a credit for recovered cleanup/purge material is used, the volume of this material added to the recovery container, in gallons per day; and the adjusted volume of cleanup/purge materials employed, calculate by subtracting the volume of the recovered cleanup/purge material added to the recovery container, from the volume of the total cleanup/purge material applied (h), in gallons per day (adjusted);
  - k. the OC content of each cleanup material applied, in pounds per gallon;
  - l. the total OC emissions from cleanup materials, calculated using the summation of all cleanup materials applied (h) or the adjusted amount after recovery (j), calculated as required in Section A.V.1.d.i, in pounds per day; and
  - m. the total OC emission rate for all politen mixes employed and all cleanup materials, in pounds per day, calculated as required in Section A.V.1.d.ii.
2. Except as otherwise provided in this section, the permittee shall perform inspections of this emissions unit in accordance with the following frequencies:
- |                               |   |
|-------------------------------|---|
| Process unit:                 | closed delivery of politen mix to the pultrusion unit either by pumping or gravity feed through a pipe line |
| Minimum inspection frequency: | daily when the unit is in operation   |
| Process unit:                 | wet area enclosure with resin drip collection   |
| Minimum inspection frequency: | daily when the unit is in operation   |
3. The purpose of the inspections is to ensure that the methods to reduce styrene emissions are employed. The inspections shall be performed during representative, normal operation conditions.
4. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain daily records of the following information:
- a. the date and reason any required inspection was not performed; and
  - b. the date and duration that the wet area enclosure (and/or access panels, doors, hatches) is/are open and politen mix is present in the bath.

6. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup and purge materials, and the recovery container serving this emissions unit:
  - a. the date the materials from the recovery container were shipped off site; and
  - b. the number of gallons or pounds of materials from the recovery container shipped off site.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 0.27 pounds per hour, and the actual average hourly OC emissions for each such day;
  - b. an identification of each day during which the OC emissions from this emissions unit exceeded 6.48 pounds per day, and the actual OC emissions for each such day;
  - c. an identification of each day during which the OC emissions from the politen mix and the cleanup materials exceeded 7.0 per day, and the actual OC emissions for each such day;
  - d. an identification of each day during which any photochemically reactive cleanup materials were employed;
  - e. an identification of each day during which an inspection was not performed by the required frequency; and
  - f. an identification of the date and duration of time that the wet area enclosure was removed or the access panels, doors, and/or hatches was/were open when politen mix or resin was present in the bath, for a any period of time exceeding 30 minutes per any 8-hours shift or 45 minutes per any 12-hour shift.
2. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.
3. The permittee shall submit to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) an Initial Notification to be submitted no later than 120 days after the effective date of 40 CFR 63 subpart WWW, or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2).
4. The permittee shall submit a Notification of Compliance status report, in accordance with 40 CFR 63.9(h), to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control,

Central Office) within 30 days after completion of the relevant compliance demonstration. In accordance to Table 8 of the proposed MACT, the Notice of Compliance shall include a certified statement that this pultrusion unit is using a wet area enclosure that meets the criteria of 63.5830.

## V. Testing Requirements

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

- a. Emission Limitation:

6.48 lbs OC/day, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in Section A.III.1.c & d. Compliance shall be determined based upon the following equation:

$$EM(OC) = \text{summation of } (W_i \times OC_i) \times EF(OC) \times (0.40)$$

where:

$EM(OC)$  = OC emissions as styrene from the politen mix operations, in pounds per day.

$W_i$  = the weight of politen mix  $i$  employed, in pounds per day.

$OC_i$  = the styrene content of politen mix  $i$ , in percent by weight.

$EF(OC)$  = the emissions factor for OC emissions, which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88)).

0.40 = a factor that accounts for the 60 weight percent reduction of styrene by compliance with Section A.I.2.c.

- b. Emission Limitation:

0.27 lbs OC/hr, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined by dividing the daily OC emissions, as calculated in Section A.V.1.a, by the number of actual number of hours that the emissions unit was in operation, as recorded in Section A.III.1.f.

If required, the permittee shall demonstrate compliance with this emission limitation or the 60% by weight styrene emissions reduction through emission tests performed in

accordance with 40 CFR Part 60, Appendix A, Method 18, 25 or 25A, and/or 40 CFR Part 51, Appendix M, Methods 204 A through F as appropriate, or an equivalent alternate method as approved by Ohio EPA.

c. Emission Limitation:

1.18 tons OC/year, excluding emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1, and adding the daily OC emissions from politen mix, as recorded each day in Section A.III.1.e and calculated per Section A.V.1.a, from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

d. Emission Limitation:

7.0 lbs OC/day, including emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1.

i. Determination of OC emissions for all cleanup materials shall be determined based upon the following equations:

$$EC(OC) = \text{summation of } (V_i \times OC_i)$$

where:

$EC(OC)$  = OC emissions from the cleanup materials, in pounds per day.

$V_i$  = the volume of cleanup material applied, as specified in Section A.III.1.h or j (adjusted), in gallons per day.

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

ii. The total daily OC emissions from this emissions unit, recorded in Section A.III.1.m, shall be the sum of the emissions from the politen mixes, calculated in Section A.V.1.a, and the emissions from cleanup materials as calculated above (Section A.V.1.d.i).

e. Emission Limitation:

1.27 tons OC/year, including emissions from cleanup.

Applicable Compliance Method:

Compliance with the annual OC limit for this emissions unit shall be determined at the end of each year, by adding the daily emissions, calculated as required in Sections A.V.1.d.ii and as recorded in Section A.III.1.m, for each day of the year, and dividing this total by 2000 pounds/ton.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P005 - Pultrusion Unit No. 5, with no air pollution control equipment.	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P006 - Pultrusion Unit No. 6, with no air pollution control equipment.	OAC Rule 3745-31-05(A)(3)	Organic Compound emissions, excluding emissions from clean-up shall not exceed: 0.27 lb/hr, 6.48 lbs/day, and 1.18 tons/year.
		Organic Compound emissions, including emissions from clean-up shall not exceed: 7.0 lbs/day and 1.27 tons/year.
		See Sections A.I.2.a, A.I.2.b, and A.I.2.c.
		The requirements of this rule also include compliance with OAC Rule 3745-31-28, as specified in Section A.I.2.c.
	OAC Rule 3745-21-07(G)(2)	The requirements of this rule are less stringent than the organic chemical emission limit established pursuant to OAC Rule 3745-31-05(A)(3).
	OAC Rule 3745-31-28	This emissions unit must comply with the MACT determination requirements as specified in Section A.I.2.c.

**2. Additional Terms and Conditions**

- 2.a The organic compound emissions from the pultrusion operations consist of styrene, a photochemically reactive material as defined in OAC Rule 3745-21-01(C)(5).
- 2.b The politen mix shall be delivered to this emissions unit by pumping or gravity feed through a pipe line (closed system).

- 2.c** Permittee shall install and operate a wet area enclosure with resin drip collection to reduce total styrene emissions by at least 60 weight percent, per the requirements contained in 63.5830 of the proposed 40 CFR 63, subpart WWWW (August 2, 2001).
- i. The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die.
  - ii. The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
  - iii. The enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
  - iv. The enclosure can only be constructed high enough to clear the highest part of the pultrusion line that must be inside the enclosure.
  - v. The total open area of the enclosure must not exceed 2 (two) times the cross sectional area of the puller window. All areas which are open need to be included in the total open area calculation with the exception of access panels, door and/or hatches that are part of the enclosure. The area which is displaced by entering reinforcement or exiting product is considered open. Areas covered by brush covers are considered closed.
  - vi. Open areas for level control devices, monitoring devices, agitation shafts, and/or fill hoses must have no more than 1.0 inch clearance.
  - vii. Any access panels, doors, and/or hatches that are part of the enclosure must close tightly to avoid vapor leakage. Damages access panels, doors, and/or hatches that allow vapor leakage must be replaced.
  - viii. The wet area enclosure shall not be removed from the pultrusion line and/or the access panels, doors, and/or hatches to the wet area enclosure must remain closed whenever politen mix or resin is in the bath, except for the following periods of time:
    - (a.) 30 minutes per any 8 hour shift
    - (b.) 45 minutes per any 12 hour shift.
  - ix. No fans, blowers, and/or air lines shall be allowed within the enclosure. The enclosure must not be ventilated.
  - x. Resin drip is captured within the enclosure and returned by gravity to the resin bath.
- 2.d** On August 2, 2001 , U.S. EPA proposed the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW. When the NESHAP is promulgated, the facility will be subject as an

existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

- i. Initial Notification: Shall be submitted no later than 120 days after the effective date of the standard or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2). See Section A.IV.4.
- ii. Notification of Compliance status: Shall be submitted in accordance with 40 CFR 63.9(h) within 30 days after completion of the relevant compliance demonstration. See Section A.IV.5.
- iii. If the requirements of the final MACT standard are different from those specified in this permit, then the permittee shall submit an application for a PTI modification within 18 months after promulgation of this NESHAP standard.

## **II. Operational Restrictions**

1. The use of photochemically reactive cleanup materials is prohibited.
2. Product to be cut by a wet cut or mold terminate, not to produce particulate emissions.

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

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each politen mix employed and each cleanup material employed;
  - b. an identification of whether or not each cleanup material employed is a photochemically reactive material;
  - c. the weight of each politen mix employed, in pounds;
  - d. the styrene content of each politen mix employed, in percent by weight;
  - e. the total organic compound (OC) emission rate for all politen mixes employed, calculated as required in Section A.V.1.a;
  - f. the actual number of hours that the emissions unit was in operation;
  - g. the average hourly OC emission rate for all politen mixes employed, calculated per Sections A.V.1.a. & b;
  - h. the volume, in gallons, of each cleanup material applied;

- i. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in Section A.III.6;
  - j. if a credit for recovered cleanup/purge material is used, the volume of this material added to the recovery container, in gallons per day; and the adjusted volume of cleanup/purge materials employed, calculate by subtracting the volume of the recovered cleanup/purge material added to the recovery container, from the volume of the total cleanup/purge material applied (h), in gallons per day (adjusted);
  - k. the OC content of each cleanup material applied, in pounds per gallon;
  - l. the total OC emissions from cleanup materials, calculated using the summation of all cleanup materials applied (h) or the adjusted amount after recovery (j), calculated as required in Section A.V.1.d.i, in pounds per day; and
  - m. the total OC emission rate for all politen mixes employed and all cleanup materials, in pounds per day, calculated as required in Section A.V.1.d.ii.
2. Except as otherwise provided in this section, the permittee shall perform inspections of this emissions unit in accordance with the following frequencies:

Process unit:	closed delivery of politen mix to the pultrusion unit either by pumping or gravity feed through a pipe line
Minimum inspection frequency:	daily when the unit is in operation
Process unit:	wet area enclosure with resin drip collection
Minimum inspection frequency:	daily when the unit is in operation
3. The purpose of the inspections is to ensure that the methods to reduce styrene emissions are employed. The inspections shall be performed during representative, normal operation conditions.
4. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain daily records of the following information:
  - a. the date and reason any required inspection was not performed; and
  - b. the date and duration that the wet area enclosure (and/or access panels, doors, hatches) is/are open and politen mix is present in the bath.

6. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup and purge materials, and the recovery container serving this emissions unit:
  - a. the date the materials from the recovery container were shipped off site; and
  - b. the number of gallons or pounds of materials from the recovery container shipped off site.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 0.27 pounds per hour, and the actual average hourly OC emissions for each such day;
  - b. an identification of each day during which the OC emissions from this emissions unit exceeded 6.48 pounds per day, and the actual OC emissions for each such day;
  - c. an identification of each day during which the OC emissions from the politen mix and the cleanup materials exceeded 7.0 per day, and the actual OC emissions for each such day;
  - d. an identification of each day during which any photochemically reactive cleanup materials were employed;
  - e. an identification of each day during which an inspection was not performed by the required frequency; and
  - f. an identification of the date and duration of time that the wet area enclosure was removed or the access panels, doors, and/or hatches was/were open when politen mix or resin was present in the bath, for a any period of time exceeding 30 minutes per any 8-hours shift or 45 minutes per any 12-hour shift.
2. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.
3. The permittee shall submit to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) an Initial Notification to be submitted no later than 120 days after the effective date of 40 CFR 63 subpart WWW, or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2).
4. The permittee shall submit a Notification of Compliance status report, in accordance with 40 CFR 63.9(h), to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control,

Central Office) within 30 days after completion of the relevant compliance demonstration. In accordance to Table 8 of the proposed MACT, the Notice of Compliance shall include a certified statement that this pultrusion unit is using a wet area enclosure that meets the criteria of 63.5830.

## V. Testing Requirements

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

- a. Emission Limitation:

6.48 lbs OC/day, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in Section A.III.1.c & d. Compliance shall be determined based upon the following equation:

$$EM(OC) = \text{summation of } (W_i \times OC_i) \times EF(OC) \times (0.40)$$

where:

$EM(OC)$  = OC emissions as styrene from the politen mix operations, in pounds per day.

$W_i$  = the weight of politen mix  $i$  employed, in pounds per day.

$OC_i$  = the styrene content of politen mix  $i$ , in percent by weight.

$EF(OC)$  = the emissions factor for OC emissions, which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88)).

0.40 = a factor that accounts for the 60 weight percent reduction of styrene by compliance with Section A.I.2.c.

- b. Emission Limitation:

0.27 lbs OC/hr, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined by dividing the daily OC emissions, as calculated in Section A.V.1.a, by the number of actual number of hours that the emissions unit was in operation, as recorded in Section A.III.1.f.

If required, the permittee shall demonstrate compliance with this emission limitation or the 60% by weight styrene emissions reduction through emission tests performed in

accordance with 40 CFR Part 60, Appendix A, Method 18, 25 or 25A, and/or 40 CFR Part 51, Appendix M, Methods 204 A through F as appropriate, or an equivalent alternate method as approved by Ohio EPA.

c. Emission Limitation:

1.18 tons OC/year, excluding emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1, and adding the daily OC emissions from politen mix, as recorded each day in Section A.III.1.e and calculated per Section A.V.1.a, from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

d. Emission Limitation:

7.0 lbs OC/day, including emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1.

i. Determination of OC emissions for all cleanup materials shall be determined based upon the following equations:

$$EC(OC) = \text{summation of } (V_i \times OC_i)$$

where:

$EC(OC)$  = OC emissions from the cleanup materials, in pounds per day.

$V_i$  = the volume of cleanup material applied, as specified in Section A.III.1.h or j (adjusted), in gallons per day.

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

ii. The total daily OC emissions from this emissions unit, recorded in Section A.III.1.m, shall be the sum of the emissions from the politen mixes, calculated in Section A.V.1.a, and the emissions from cleanup materials as calculated above (Section A.V.1.d.i).

e. Emission Limitation:

1.27 tons OC/year, including emissions from cleanup.

Applicable Compliance Method:

Compliance with the annual OC limit for this emissions unit shall be determined at the end of each year, by adding the daily emissions, calculated as required in Sections A.V.1.d.ii and as recorded in Section A.III.1.m, for each day of the year, and dividing this total by 2000 pounds/ton.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P006 - Pultrusion Unit No. 6, with no air pollution control equipment.	None	None

2. **Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P007 - Pultrusion Unit No. 7, with no air pollution control equipment.	OAC Rule 3745-31-05(A)(3)	Organic Compound emissions, excluding emissions from clean-up shall not exceed: 0.27 lb/hr, 6.48 lbs/day, and 1.18 tons/year.
		Organic Compound emissions, including emissions from clean-up shall not exceed: 7.0 lbs/day and 1.27 tons/year.
		See Sections A.I.2.a, A.I.2.b, and A.I.2.c.
		The requirements of this rule also include compliance with OAC Rule 3745-31-28, as specified in Section A.I.2.c.
	OAC Rule 3745-21-07(G)(2)	The requirements of this rule are less stringent than the organic chemical emission limit established pursuant to OAC Rule 3745-31-05(A)(3).
	OAC Rule 3745-31-28	This emissions unit must comply with the MACT determination requirements as specified in Section A.I.2.c.

**2. Additional Terms and Conditions**

- 2.a The organic compound emissions from the pultrusion operations consist of styrene, a photochemically reactive material as defined in OAC Rule 3745-21-01(C)(5).
- 2.b The politen mix shall be delivered to this emissions unit by pumping or gravity feed through a pipe line (closed system).

- 2.c** Permittee shall install and operate a wet area enclosure with resin drip collection to reduce total styrene emissions by at least 60 weight percent, per the requirements contained in 63.5830 of the proposed 40 CFR 63, subpart WWWW (August 2, 2001).
- i. The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die.
  - ii. The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
  - iii. The enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
  - iv. The enclosure can only be constructed high enough to clear the highest part of the pultrusion line that must be inside the enclosure.
  - v. The total open area of the enclosure must not exceed 2 (two) times the cross sectional area of the puller window. All areas which are open need to be included in the total open area calculation with the exception of access panels, door and/or hatches that are part of the enclosure. The area which is displaced by entering reinforcement or exiting product is considered open. Areas covered by brush covers are considered closed.
  - vi. Open areas for level control devices, monitoring devices, agitation shafts, and/or fill hoses must have no more than 1.0 inch clearance.
  - vii. Any access panels, doors, and/or hatches that are part of the enclosure must close tightly to avoid vapor leakage. Damages access panels, doors, and/or hatches that allow vapor leakage must be replaced.
  - viii. The wet area enclosure shall not be removed from the pultrusion line and/or the access panels, doors, and/or hatches to the wet area enclosure must remain closed whenever politen mix or resin is in the bath, except for the following periods of time:
    - (a.) 30 minutes per any 8 hour shift
    - (b.) 45 minutes per any 12 hour shift.
  - ix. No fans, blowers, and/or air lines shall be allowed within the enclosure. The enclosure must not be ventilated.
  - x. Resin drip is captured within the enclosure and returned by gravity to the resin bath.
- 2.d** On August 2, 2001 , U.S. EPA proposed the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW. When the NESHAP is promulgated, the facility will be subject as an

existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

- i. Initial Notification: Shall be submitted no later than 120 days after the effective date of the standard or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2). See Section A.IV.4.
- ii. Notification of Compliance status: Shall be submitted in accordance with 40 CFR 63.9(h) within 30 days after completion of the relevant compliance demonstration. See Section A.IV.5.
- iii. If the requirements of the final MACT standard are different from those specified in this permit, then the permittee shall submit an application for a PTI modification within 18 months after promulgation of this NESHAP standard.

## **II. Operational Restrictions**

1. The use of photochemically reactive cleanup materials is prohibited.
2. Product to be cut by a wet cut or mold terminate, not to produce particulate emissions.

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

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each politen mix employed and each cleanup material employed;
  - b. an identification of whether or not each cleanup material employed is a photochemically reactive material;
  - c. the weight of each politen mix employed, in pounds;
  - d. the styrene content of each politen mix employed, in percent by weight;
  - e. the total organic compound (OC) emission rate for all politen mixes employed, calculated as required in Section A.V.1.a;
  - f. the actual number of hours that the emissions unit was in operation;
  - g. the average hourly OC emission rate for all politen mixes employed, calculated per Sections A.V.1.a. & b;
  - h. the volume, in gallons, of each cleanup material applied;

- i. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in Section A.III.6;
  - j. if a credit for recovered cleanup/purge material is used, the volume of this material added to the recovery container, in gallons per day; and the adjusted volume of cleanup/purge materials employed, calculate by subtracting the volume of the recovered cleanup/purge material added to the recovery container, from the volume of the total cleanup/purge material applied (h), in gallons per day (adjusted);
  - k. the OC content of each cleanup material applied, in pounds per gallon;
  - l. the total OC emissions from cleanup materials, calculated using the summation of all cleanup materials applied (h) or the adjusted amount after recovery (j), calculated as required in Section A.V.1.d.i, in pounds per day; and
  - m. the total OC emission rate for all politen mixes employed and all cleanup materials, in pounds per day, calculated as required in Section A.V.1.d.ii.
2. Except as otherwise provided in this section, the permittee shall perform inspections of this emissions unit in accordance with the following frequencies:

Process unit:	closed delivery of politen mix to the pultrusion unit either by pumping or gravity feed through a pipe line
Minimum inspection frequency:	daily when the unit is in operation
Process unit:	wet area enclosure with resin drip collection
Minimum inspection frequency:	daily when the unit is in operation
3. The purpose of the inspections is to ensure that the methods to reduce styrene emissions are employed. The inspections shall be performed during representative, normal operation conditions.
4. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain daily records of the following information:
  - a. the date and reason any required inspection was not performed; and
  - b. the date and duration that the wet area enclosure (and/or access panels, doors, hatches) is/are open and politen mix is present in the bath.

6. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup and purge materials, and the recovery container serving this emissions unit:
  - a. the date the materials from the recovery container were shipped off site; and
  - b. the number of gallons or pounds of materials from the recovery container shipped off site.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 0.27 pounds per hour, and the actual average hourly OC emissions for each such day;
  - b. an identification of each day during which the OC emissions from this emissions unit exceeded 6.48 pounds per day, and the actual OC emissions for each such day;
  - c. an identification of each day during which the OC emissions from the politen mix and the cleanup materials exceeded 7.0 per day, and the actual OC emissions for each such day;
  - d. an identification of each day during which any photochemically reactive cleanup materials were employed;
  - e. an identification of each day during which an inspection was not performed by the required frequency; and
  - f. an identification of the date and duration of time that the wet area enclosure was removed or the access panels, doors, and/or hatches was/were open when politen mix or resin was present in the bath, for a any period of time exceeding 30 minutes per any 8-hours shift or 45 minutes per any 12-hour shift.
2. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.
3. The permittee shall submit to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) an Initial Notification to be submitted no later than 120 days after the effective date of 40 CFR 63 subpart WWW, or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2).
4. The permittee shall submit a Notification of Compliance status report, in accordance with 40 CFR 63.9(h), to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control,

Central Office) within 30 days after completion of the relevant compliance demonstration. In accordance to Table 8 of the proposed MACT, the Notice of Compliance shall include a certified statement that this pultrusion unit is using a wet area enclosure that meets the criteria of 63.5830.

## V. Testing Requirements

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

- a. Emission Limitation:

6.48 lbs OC/day, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in Section A.III.1.c & d. Compliance shall be determined based upon the following equation:

$$EM(OC) = \text{summation of } (W_i \times OC_i) \times EF(OC) \times (0.40)$$

where:

$EM(OC)$  = OC emissions as styrene from the politen mix operations, in pounds per day.

$W_i$  = the weight of politen mix  $i$  employed, in pounds per day.

$OC_i$  = the styrene content of politen mix  $i$ , in percent by weight.

$EF(OC)$  = the emissions factor for OC emissions, which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88)).

0.40 = a factor that accounts for the 60 weight percent reduction of styrene by compliance with Section A.I.2.c.

- b. Emission Limitation:

0.27 lbs OC/hr, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined by dividing the daily OC emissions, as calculated in Section A.V.1.a, by the number of actual number of hours that the emissions unit was in operation, as recorded in Section A.III.1.f.

If required, the permittee shall demonstrate compliance with this emission limitation or the 60% by weight styrene emissions reduction through emission tests performed in

accordance with 40 CFR Part 60, Appendix A, Method 18, 25 or 25A, and/or 40 CFR Part 51, Appendix M, Methods 204 A through F as appropriate, or an equivalent alternate method as approved by Ohio EPA.

c. Emission Limitation:

1.18 tons OC/year, excluding emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1, and adding the daily OC emissions from politen mix, as recorded each day in Section A.III.1.e and calculated per Section A.V.1.a, from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

d. Emission Limitation:

7.0 lbs OC/day, including emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1.

i. Determination of OC emissions for all cleanup materials shall be determined based upon the following equations:

$$EC(OC) = \text{summation of } (V_i \times OC_i)$$

where:

$EC(OC)$  = OC emissions from the cleanup materials, in pounds per day.

$V_i$  = the volume of cleanup material applied, as specified in Section A.III.1.h or j (adjusted), in gallons per day.

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

ii. The total daily OC emissions from this emissions unit, recorded in Section A.III.1.m, shall be the sum of the emissions from the politen mixes, calculated in Section A.V.1.a, and the emissions from cleanup materials as calculated above (Section A.V.1.d.i).

e. Emission Limitation:

1.27 tons OC/year, including emissions from cleanup.

Applicable Compliance Method:

Compliance with the annual OC limit for this emissions unit shall be determined at the end of each year, by adding the daily emissions, calculated as required in Sections A.V.1.d.ii and as recorded in Section A.III.1.m, for each day of the year, and dividing this total by 2000 pounds/ton.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P007 - Pultrusion Unit No. 7, with no air pollution control equipment.	None	None

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P008 - Pultrusion Unit No. 8, with no air pollution control equipment.	OAC Rule 3745-31-05(A)(3)	Organic Compound emissions, excluding emissions from clean-up shall not exceed: 0.27 lb/hr, 6.48 lbs/day, and 1.18 tons/year.
		Organic Compound emissions, including emissions from clean-up shall not exceed: 7.0 lbs/day and 1.27 tons/year.
		See Sections A.I.2.a, A.I.2.b, and A.I.2.c.
		The requirements of this rule also include compliance with OAC Rule 3745-31-28, as specified in Section A.I.2.c.
	OAC Rule 3745-21-07(G)(2)	The requirements of this rule are less stringent than the organic chemical emission limit established pursuant to OAC Rule 3745-31-05(A)(3).
	OAC Rule 3745-31-28	This emissions unit must comply with the MACT determination requirements as specified in Section A.I.2.c.

**2. Additional Terms and Conditions**

- 2.a The organic compound emissions from the pultrusion operations consist of styrene, a photochemically reactive material as defined in OAC Rule 3745-21-01(C)(5).
- 2.b The politen mix shall be delivered to this emissions unit by pumping or gravity feed through a pipe line (closed system).

- 2.c** Permittee shall install and operate a wet area enclosure with resin drip collection to reduce total styrene emissions by at least 60 weight percent, per the requirements contained in 63.5830 of the proposed 40 CFR 63, subpart WWWW (August 2, 2001).
- i. The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die.
  - ii. The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
  - iii. The enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
  - iv. The enclosure can only be constructed high enough to clear the highest part of the pultrusion line that must be inside the enclosure.
  - v. The total open area of the enclosure must not exceed 2 (two) times the cross sectional area of the puller window. All areas which are open need to be included in the total open area calculation with the exception of access panels, door and/or hatches that are part of the enclosure. The area which is displaced by entering reinforcement or exiting product is considered open. Areas covered by brush covers are considered closed.
  - vi. Open areas for level control devices, monitoring devices, agitation shafts, and/or fill hoses must have no more than 1.0 inch clearance.
  - vii. Any access panels, doors, and/or hatches that are part of the enclosure must close tightly to avoid vapor leakage. Damages access panels, doors, and/or hatches that allow vapor leakage must be replaced.
  - viii. The wet area enclosure shall not be removed from the pultrusion line and/or the access panels, doors, and/or hatches to the wet area enclosure must remain closed whenever politen mix or resin is in the bath, except for the following periods of time:
    - (a.) 30 minutes per any 8 hour shift
    - (b.) 45 minutes per any 12 hour shift.
  - ix. No fans, blowers, and/or air lines shall be allowed within the enclosure. The enclosure must not be ventilated.
  - x. Resin drip is captured within the enclosure and returned by gravity to the resin bath.
- 2.d** On August 2, 2001 , U.S. EPA proposed the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW. When the NESHAP is promulgated, the facility will be subject as an

existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:

- i. Initial Notification: Shall be submitted no later than 120 days after the effective date of the standard or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2). See Section A.IV.4.
- ii. Notification of Compliance status: Shall be submitted in accordance with 40 CFR 63.9(h) within 30 days after completion of the relevant compliance demonstration. See Section A.IV.5.
- iii. If the requirements of the final MACT standard are different from those specified in this permit, then the permittee shall submit an application for a PTI modification within 18 months after promulgation of this NESHAP standard.

## **II. Operational Restrictions**

1. The use of photochemically reactive cleanup materials is prohibited.
2. Product to be cut by a wet cut or mold terminate, not to produce particulate emissions.

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

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each politen mix employed and each cleanup material employed;
  - b. an identification of whether or not each cleanup material employed is a photochemically reactive material;
  - c. the weight of each politen mix employed, in pounds;
  - d. the styrene content of each politen mix employed, in percent by weight;
  - e. the total organic compound (OC) emission rate for all politen mixes employed, calculated as required in Section A.V.1.a;
  - f. the actual number of hours that the emissions unit was in operation;
  - g. the average hourly OC emission rate for all politen mixes employed, calculated per Sections A.V.1.a. & b;
  - h. the volume, in gallons, of each cleanup material applied;

- i. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in Section A.III.6;
  - j. if a credit for recovered cleanup/purge material is used, the volume of this material added to the recovery container, in gallons per day; and the adjusted volume of cleanup/purge materials employed, calculate by subtracting the volume of the recovered cleanup/purge material added to the recovery container, from the volume of the total cleanup/purge material applied (h), in gallons per day (adjusted);
  - k. the OC content of each cleanup material applied, in pounds per gallon;
  - l. the total OC emissions from cleanup materials, calculated using the summation of all cleanup materials applied (h) or the adjusted amount after recovery (j), calculated as required in Section A.V.1.d.i, in pounds per day; and
  - m. the total OC emission rate for all politen mixes employed and all cleanup materials, in pounds per day, calculated as required in Section A.V.1.d.ii.
2. Except as otherwise provided in this section, the permittee shall perform inspections of this emissions unit in accordance with the following frequencies:
- |                               |   |
|-------------------------------|---|
| Process unit:                 | closed delivery of politen mix to the pultrusion unit either by pumping or gravity feed through a pipe line |
| Minimum inspection frequency: | daily when the unit is in operation   |
| Process unit:                 | wet area enclosure with resin drip collection   |
| Minimum inspection frequency: | daily when the unit is in operation   |
3. The purpose of the inspections is to ensure that the methods to reduce styrene emissions are employed. The inspections shall be performed during representative, normal operation conditions.
4. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain daily records of the following information:
- a. the date and reason any required inspection was not performed; and
  - b. the date and duration that the wet area enclosure (and/or access panels, doors, hatches) is/are open and politen mix is present in the bath.

6. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup and purge materials, and the recovery container serving this emissions unit:
  - a. the date the materials from the recovery container were shipped off site; and
  - b. the number of gallons or pounds of materials from the recovery container shipped off site.

#### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 0.27 pounds per hour, and the actual average hourly OC emissions for each such day;
  - b. an identification of each day during which the OC emissions from this emissions unit exceeded 6.48 pounds per day, and the actual OC emissions for each such day;
  - c. an identification of each day during which the OC emissions from the politen mix and the cleanup materials exceeded 7.0 per day, and the actual OC emissions for each such day;
  - d. an identification of each day during which any photochemically reactive cleanup materials were employed;
  - e. an identification of each day during which an inspection was not performed by the required frequency; and
  - f. an identification of the date and duration of time that the wet area enclosure was removed or the access panels, doors, and/or hatches was/were open when politen mix or resin was present in the bath, for a any period of time exceeding 30 minutes per any 8-hours shift or 45 minutes per any 12-hour shift.
2. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.
3. The permittee shall submit to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) an Initial Notification to be submitted no later than 120 days after the effective date of 40 CFR 63 subpart WWWW, or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2).
4. The permittee shall submit a Notification of Compliance status report, in accordance with 40 CFR 63.9(h), to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control,

Central Office) within 30 days after completion of the relevant compliance demonstration. In accordance to Table 8 of the proposed MACT, the Notice of Compliance shall include a certified statement that this pultrusion unit is using a wet area enclosure that meets the criteria of 63.5830.

## V. Testing Requirements

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

- a. Emission Limitation:

6.48 lbs OC/day, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in Section A.III.1.c & d. Compliance shall be determined based upon the following equation:

$$EM(OC) = \text{summation of } (W_i \times OC_i) \times EF(OC) \times (0.40)$$

where:

$EM(OC)$  = OC emissions as styrene from the politen mix operations, in pounds per day.

$W_i$  = the weight of politen mix  $i$  employed, in pounds per day.

$OC_i$  = the styrene content of politen mix  $i$ , in percent by weight.

$EF(OC)$  = the emissions factor for OC emissions, which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88)).

0.40 = a factor that accounts for the 60 weight percent reduction of styrene by compliance with Section A.I.2.c.

- b. Emission Limitation:

0.27 lbs OC/hr, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined by dividing the daily OC emissions, as calculated in Section A.V.1.a, by the number of actual number of hours that the emissions unit was in operation, as recorded in Section A.III.1.f.

If required, the permittee shall demonstrate compliance with this emission limitation or the 60% by weight styrene emissions reduction through emission tests performed in

accordance with 40 CFR Part 60, Appendix A, Method 18, 25 or 25A, and/or 40 CFR Part 51, Appendix M, Methods 204 A through F as appropriate, or an equivalent alternate method as approved by Ohio EPA.

c. Emission Limitation:

1.18 tons OC/year, excluding emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1, and adding the daily OC emissions from politen mix, as recorded each day in Section A.III.1.e and calculated per Section A.V.1.a, from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

d. Emission Limitation:

7.0 lbs OC/day, including emissions from cleanup.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1.

i. Determination of OC emissions for all cleanup materials shall be determined based upon the following equations:

$$EC(OC) = \text{summation of } (V_i \times OC_i)$$

where:

$EC(OC)$  = OC emissions from the cleanup materials, in pounds per day.

$V_i$  = the volume of cleanup material applied, as specified in Section A.III.1.h or j (adjusted), in gallons per day.

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

ii. The total daily OC emissions from this emissions unit, recorded in Section A.III.1.m, shall be the sum of the emissions from the politen mixes, calculated in Section A.V.1.a, and the emissions from cleanup materials as calculated above (Section A.V.1.d.i).

e. Emission Limitation:

1.27 tons OC/year, including emissions from cleanup.

Applicable Compliance Method:

Compliance with the annual OC limit for this emissions unit shall be determined at the end of each year, by adding the daily emissions, calculated as required in Sections A.V.1.d.ii and as recorded in Section A.III.1.m, for each day of the year, and dividing this total by 2000 pounds/ton.

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P008 - Pultrusion Unit No. 8, with no air pollution control equipment.	None	None

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P009- Politen Mix Unit No. 1, with a 99.9% efficient fabric filter for dust collection.	OAC Rule 3745-31-05(A)(3)	<p>Organic Compounds emissions, excluding emissions from clean-up shall not exceed:            2.28 lbs/hr, 40 lbs/day, and 7.3 tons/year</p> <p>Organic Compounds emissions, including emissions from clean-up shall not exceed:            43.84 lbs/day and 8.01 tons/year</p> <p>See Sections A.I.2.a and A.I.2.b.</p> <p>The requirements of this rule also include compliance with OAC Rule 3745-31-28, as specified in Section A.I.2.c.</p> <p>Particulate emissions shall not exceed:            0.09 lb/hr and 0.4 ton/year</p> <p>Visible emissions (VE) from this emissions unit shall not exceed 5% opacity as a 6-minute average, except as specified by rule.</p>
	OAC Rule 3745-21-07(G)(2)	The requirements of this rule are less stringent than the organic chemical emission limit established pursuant to OAC Rule 3745-31-05(A)(3).
	OAC Rule 3745-31-28	This emissions unit must comply with the MACT determination requirements as specified in Section A.I.2.c.

OAC Rule 3745-17-07(A)	The requirements of this rule are less stringent than the visible particulate emission limit established pursuant to OAC Rule 3745-31-05(A)(3).
OAC Rule 3745-17-11	The requirements of this rule are less stringent than the particulate emission limit established pursuant to OAC Rule 3745-31-05(A)(3).

## 2. Additional Terms and Conditions

- 2.a** Raw materials (resins and styrene monomers) will be delivered to the mixer either by pumping or gravity feed through a pipe line.
- 2.b** The organic compound emissions from the mix operations consist of styrene, a photochemically reactive material as defined in OAC Rule 3745-21-01(C)(5).
- 2.c** The following work practice standards shall be employed to minimize the generation of styrene emissions:
- i. A mix cover with no visible gaps present in the mix cover shall be used.
  - ii. The mix cover shall be kept closed during mixing , except when adding material to the mixing vessels.
- 2.d** On August 2, 2001 , U.S. EPA proposed the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW. When the NESHAP is promulgated, the facility will be subject as an existing major source with a compliance date as specified in the NESHAP. Pursuant to the Subpart, the permittee shall submit the following notifications:
- i. Initial Notification: Shall be submitted no later than 120 days after the effective date of the standard or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2). See Section A.IV.4.
  - ii. Notification of Compliance status: Shall be submitted in accordance with 40 CFR 63.9(h) within 30 days after completion of the relevant compliance demonstration. See Section A.IV.5.
  - iii. If the requirements of the final MACT standard are different from those specified in this permit, then the permittee shall submit an application for a PTI modification within 18 months after promulgation of this NESHAP standard.

## II Operational Restrictions

1. The particulate emissions from this emissions unit will be controlled by a fabric filter with an operating capture efficiency of 99.9%, whenever this emissions unit is in operation.
2. The use of photochemically reactive cleanup materials is prohibited.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each day for this emissions unit:
  - a. the company identification for each politen mix produced and each cleanup material employed;
  - b. an identification of whether or not each cleanup material employed is a photochemically reactive material;
  - c. the weight of each politen mix produced, in pounds;
  - d. the styrene content of each politen mix produced, in percent by weight;
  - e. the total organic compound (OC) emission rate for all politen mixes, in pounds, calculated as required in Section A.V.1.a;
  - f. the actual number of hours that the emissions unit was in operation;
  - g. the average hourly OC emission rate for all politen mixes, i.e., (e) divided by (f), in pounds per hour (average);
  - h. the volume, in gallons, of each cleanup material applied;
  - i. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in Section A.III.6;
  - j. if a credit for recovered cleanup/purge material is used, the volume of this material added to the recovery container, in gallons per day; and the adjusted volume of cleanup/purge materials employed, calculate by subtracting the volume of the recovered cleanup/purge material added to the recovery container, from the volume of the total cleanup/purge material applied (h), in gallons per day (adjusted);
  - k. the OC content of each cleanup material applied, in pounds per gallon;

- l. the total OC emissions from cleanup materials, calculated using the summation of all cleanup materials applied (h) or the adjusted amount after recovery (j), calculated as required in Section A.V.1.d.i., in pounds per day;
  - m. the total OC emission rate for all politen mixes and all cleanup materials, in pounds per day; and
  - n. an identification of any time periods when the particulate control filter was not in service when the emissions unit was in operation.
2. Except as otherwise provided in this section, the permittee shall perform inspections of this emissions unit in accordance with the following frequencies:
- |                               |  |
|-------------------------------|--|
| Process unit:                 | closed delivery of raw materials (resins and styrene monomers) to the mixer either by pumping or gravity feed through a pipe line. |
| Minimum inspection frequency: | daily when the unit is in operation  |
| Process unit:                 | closed mix cover with no visible gaps present during mixing, except when adding material to the mixing vessel.                     |
| Minimum inspection frequency: | once per politen mix batch produced  |
3. The purpose of the inspections is to ensure that equipment standard(s) or work practice(s) to minimize styrene emissions are employed. The inspections shall be performed during representative, normal operation conditions.
4. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
5. The permittee shall maintain daily records of the following information:
- a. the date and reason any required inspection was not performed; and
  - b. the dates the equipment standard(s) or work practice(s) were not implemented when the emissions unit was in operation.
6. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup and purge materials, and the recovery container serving this emissions unit:
- a. the date the materials from the recovery container were shipped off site; and
  - b. the number of gallons or pounds of materials from the recovery container shipped off site.

#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. an identification of each day during which the average hourly OC emissions from the politen mix exceeded 2.28 pounds per hour, and the actual average hourly OC emissions for each such day;
  - b. an identification of each day during which the OC emissions from the politen mix exceeded 40 pounds per day, and the actual OC emissions for each such day;
  - c. an identification of each day during which the OC emissions from the politen mix and the cleanup materials exceeded 43.84 per day, and the actual OC emissions for each such day;
  - d. an identification of each day during which any photochemically reactive cleanup materials were employed;
  - e. an identification of each day during which an inspection was not performed by the required frequency; and
  - f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented.
2. The permittee shall notify the Northeast District Office in writing of any daily record showing that the particulate control filter was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Northeast District Office within 30 days after the event occurs.
3. The permittee shall submit annual reports which specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
4. The permittee shall submit to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) an Initial Notification to be submitted no later than 120 days after the effective date of 40 CFR 63 subpart WWWW, or as specified in the standard. The notification shall contain the information specified in 40 CFR 63.9 (b)(2).
5. The permittee shall submit a Notification of Compliance status report, in accordance with 40 CFR 63.9(h), to the permitting authority (i.e., Ohio EPA, Division of Air Pollution Control, Central Office) within 30 days after completion of the relevant compliance demonstration. The Notice of Compliance shall include the following information (in accordance to Table 9 of the proposed MACT):
  - a. A certified statement, in the Notice of Compliance status report, that this mixer is equipped with a cover that does not contain any visible gaps.

- b. A certified statement, in the Notice of Compliance status report, that the mixer cover is always closed during mixing, except when adding materials to the mixer.

## V. Testing Requirements

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

- a. Emission Limitation:

40 lbs OC/day, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in Section A.III.1 (recorded in Section A.III.1.e). Compliance shall be determined based upon the following equation:

$$EM(OC) = \text{summation of } (W_i \times OC_i) \times EF(OC)$$

where:

$EM(OC)$  = OC emissions as styrene from the politen mix operations, in pounds per day.

$W_i$  = the weight of politen mix  $i$  produced, in pounds per day.

$OC_i$  = the styrene content of mix  $i$ , in percent by weight.

$EF(OC)$  = the emissions factor from AP-42 Chapter 6.4, Table 6.4-1 (1/95) for VOC emissions from mixing acrylic varnish, which is 0.01 pounds per pound of available OC content.

- b. Emission Limitation:

2.28 lbs OC/hr, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be determined by dividing the daily OC emissions, as calculated in Section A.V.1.a, by the number of actual number of hours that the emissions unit was in operation, as recorded in Section A.III.1.f. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 18, 25 or 25A, as appropriate, or an equivalent alternate method as approved by Ohio EPA.

c. Emission Limitation:

7.3 tons OC/year, excluding emissions from cleanup

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1, and adding the daily OC emissions from the politen mix, as recorded each day in Section A.III.1.e and calculated per Section A.V.1.a, from this mix unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

d. Emission Limitation:

43.0 lbs OC/day, including emissions from cleanup

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in Section A.III.1.

i. Determination of OC emissions for all cleanup materials shall be determined based upon the following equations:

$$EC(OC) = \text{summation of } (V_i \times OC_i)$$

where;

$EC(OC)$  = OC emissions from the cleanup materials, in pounds per day.

$V_i$  = the volume of cleanup material applied, as specified in Section A.III.1.h or j (adjusted), in gallons per day.

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

ii. The total daily OC emissions from this emissions unit, recorded in Section A.III.1.m, shall be the sum of the emissions from all politen mixing operations, calculated in Section A.V.1.a, and the emissions from cleanup materials as calculated above (Section A.V.1.d.i).

e. Emission Limitation:

8.01 tons OC/year, including emissions from cleanup

Applicable Compliance Method:

Compliance with the annual OC limit for this emissions unit shall be determined at the end of each year, by adding the daily emissions, calculated as required in Sections A.V.1.d.ii and

as recorded in Section A.III.1.m, for each day of the year, and dividing this total by 2000 pounds/ton.

f. Emission Limitation:

0.09 lb PE/hr

Applicable Compliance Method:

Compliance shall be based upon the following equation:

$$E(PE) = P \times \text{CONCsolid} \times EF(PE) \times (1-CE)$$

where:

P = maximum politen mix production rate, which is 1000 lbs/hr as noted in the permit application.

CONCsolid = maximum solids concentration in politen mix, which is 576.1 lbs fillers/1000 lb batch as noted in the permit application.

EF(PE) = Emission factor of 0.01 as noted in AP-42 Chapter 6.4, Reference 4 to Table 6.4-1 (1/95).

CE = efficiency of PE control device is 99.9%, or 0.999, as specified in the permit application.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

g. Emission Limitation:

0.4 ton PE/year

Applicable Compliance Method:

To determine the annual PE rate, the hourly rate as determined from A.V.1.f shall be multiplied by the summation of the actual operation hours each day as required in Section A.III.1.f for the calendar year and divided by 2000 lbs/ton

h. Emission Limitation:

5% opacity of visible PE, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

**VI. Miscellaneous Requirements**

None

**B. State Only Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P009- Politen Mix Unit No. 1, with a 99.9% efficient fabric filter for dust collection.	None	None

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None