



State of Ohio Environmental Protection Agency

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12/23/2008

Stacey Coburn *Via E-Mail Notification*  
United States Environmental Protection Agency  
Region V - AR-18J  
77 West Jackson Blvd.  
Chicago, IL 60604-3590

RE: PROPOSED AIR POLLUTION TITLE V PERMIT  
Facility Name: Comfort Line Ltd.  
Facility ID: 0448011664  
Permit Type: Initial  
Permit Number: P0088457

Dear Ms. Coburn:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc> in Microsoft Word and Adobe Acrobat format. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-3631 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

*Michael W. Ahern*  
Michael W. Ahern, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: Toledo Department of Environmental Services

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director





**State of Ohio Environmental Protection Agency  
Division of Air Pollution Control**

**PROPOSED**

**Air Pollution Title V Permit  
for  
Comfort Line Ltd.**

Facility ID: 0448011664

Permit Number: P0088457

Permit Type: Initial

Issued: 12/23/2008

Effective: To be entered upon final issuance

Expiration: To be entered upon final issuance





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Air Pollution Title V Permit**  
for  
Comfort Line Ltd.

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State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088457

**Facility ID:** 0448011664

**Effective Date:** To be entered upon final issuance

## Authorization

Facility ID: 0448011664

Facility Description: Manufacture of extruded plastics

Application Number(s): A0019614

Permit Number: P0088457

Permit Description: Pultrusion lines, mixers, and coating booths

Permit Type: Initial

Issue Date: 12/23/2008

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Superseded Permit Number:

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

Comfort Line Ltd.  
5500 Enterprise Blvd  
Toledo, OH 43216

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Toledo Department of Environmental Services  
348 South Erie Street  
Toledo, OH 43604  
(419)936-3015

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Toledo Department of Environmental Services. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088457

**Facility ID:** 0448011664

**Effective Date:** To be entered upon final issuance

## **A. Standard Terms and Conditions**



**1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations  
*(Authority for term: ORC 3704.036(A))*

**2. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*
- 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 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.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*
- c) The permittee shall submit required reports in the following manner:
  - (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:



Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.



These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.



If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))*

- (4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Toledo Department of Environmental Services.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### **3. Scheduled Maintenance**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*

### **4. Risk Management Plans**

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

### **5. 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.

*(Authority for term: OAC rule 3745-77-07(A)(5))*



## 6. 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.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

## 7. 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, in accordance with Standard Term and Condition A.11 below. 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.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
  - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
  - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
  - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee



shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

*(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))*

**8. 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.

*(Authority for term: OAC rule 3745-77-07(A)(8))*

**9. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(9))*

**10. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

*(Authority for term: OAC rule 3745-77-07(A)(10))*

**11. Reopening for Cause**

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.



- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.  
*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

## 12. 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.

*(Authority for term: OAC rule 3745-77-07(B))*

## 13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V 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:
  - (1) 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.
  - (2) 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 paragraph (E) of OAC rule 3745-77-03.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) 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:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) 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.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the



Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
- (2) Compliance certifications shall include the following:
  - (a) An identification of each term or condition of this permit that is the basis of the certification.
  - (b) The permittee's current compliance status.
  - (c) Whether compliance was continuous or intermittent.
  - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
  - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

*(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))*

#### **14. Permit Shield**

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

*(Authority for term: OAC rule 3745-77-07(F))*

#### **15. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as



soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

## **16. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

*(Authority for term: OAC rule 3745-77-07(G))*

## **17. Off-Permit Changes**

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

*(Authority for term: OAC rule 3745-77-07(I))*



**18. Compliance Method Requirements**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

*(This term is provided for informational purposes only.)*

**19. Insignificant Activities or Emissions Levels**

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**20. Permit to Install Requirement**

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**21. 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.

*(Authority for term: OAC rule 3745-77-07(A)(1))*

**22. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

*(Authority for term: OAC rule 3745-77-01)*



**23. Title VI Provisions**

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.  
*(Authority for term: OAC rule 3745-77-01(H)(11))*

**24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping 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 (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**25. Records Retention Requirements Under State Law Only**

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.

**26. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports



pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

*(Authority for term: OAC rule 3745-77-07(C))*

**27. Scheduled Maintenance/Malfunction Reporting**

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

**28. 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.

*(Authority for term: OAC rule 3745-77-01(C))*

**29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088457

**Facility ID:** 0448011664

**Effective Date:** To be entered upon final issuance

## **B. Facility-Wide Terms and Conditions**



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088457

**Facility ID:** 0448011664

**Effective Date:** To be entered upon final issuance

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
  
2. The combined emissions of Volatile Organic Compounds (VOC) from all emission units at this facility shall not exceed 90.00 tons per year, based upon a rolling, 12-month summation of the monthly emissions.  
  
The combined emissions of VOC shall include the following emission units: K001, K002, P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.
  
3. The permittee shall maintain monthly records of the following information:  
  
The rolling, 12-month summation of the VOC emissions, calculated by adding the current month's VOC emissions from all emission units at this facility to the VOC emissions for the preceding eleven calendar months from all emission units at this facility.
  
4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for VOC. These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions, of this permit.



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## **C. Emissions Unit Terms and Conditions**



**1. K001, Main Paint Line**

**Operations, Property and/or Equipment Description:**

Main Paint Line

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) d)(7) through d)(9)
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	K001 - Coating Line for fiberglass reinforced pultruded styrene resin	
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01457, issued 12/5/2006)	Volatile Organic compound (VOC) emissions from coatings employed shall not exceed 6.0 pounds per hour and 26.28 tons per year.  VOC emissions from line cleanup shall not exceed 104.9 pounds per month and 0.63 ton per year.
b.	OAC rule 3745-31-05(D) (PTI 04-01457, issued 12/5/2006)	See 2. through 4. of Section B.
c.	40 CFR Part 63 Subpart PPPP	Organic HAP emissions from all coating operations onsite shall not exceed 0.16 pounds of organic HAP emissions per pound of coating solids applied during each 12-month compliance period. See c)(3) and b)(2)b.
d.	40 CFR Part 63 Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)(1)	Visible emissions (VE) from this emissions unit shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 0.551 pound per hour.
g.	OAC rule 3745-21-07(G)(9)(f)	Exemption from OAC rule 3745-21-07(G)(2) emissions limitations due to usage of non-photochemically reactive materials. See c)2. and b)(2)i.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)a.
i.	OAC rule 3745-114	See d)(7) through d)(9)



(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions from this air contaminant source since the calculated annual emission rate for particulate emissions is less than ten tons per year taking into account the federally enforceable rule limit of 0.551 pound per hour particulate emissions under OAC rule 3745-17-11(B)(1).
- b. The permittee shall comply with the applicable provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products, as promulgated by the United States Environmental Protection Agency under 40 CFR Part 63, Subpart PPPP.
- c. The final rules found in 40 CFR Part 63, Subpart PPPP establish national emission standards for hazardous air pollutants (HAP), work practice standards, operating limitations, and compliance requirements for plastic parts coating operations. The affected source is the collection of all of the following operations for or from the surface coating of plastic parts and products:
  - i. all coating operations as defined in 40 CFR 63.4581;
  - ii. all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
  - iii. all manual and automated equipment and containers used for conveying coatings, thinners, other additives, purge, and cleaning materials; and
  - iv. all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by the coating operations.
- d. The permittee shall be subject to the requirements and limitations of this NESHAP on December 5, 2007, at which time the initial compliance period begins for the coating operations; and the initial compliance period ends on December 30, 2008.
- e. The permittee, using the "compliant material" option, shall not apply any coating in the coating operation(s) with an organic HAP content greater than or equal to the limitation(s) contained in 40 CFR 63.4490; and all the thinners, additives, and cleaning/purge materials applied shall not contain organic HAP. If any individual coating applied does not meet the limitation of the rule, or any thinner, additive, and/or cleaning/purge material contains organic HAP, the mass average organic HAP emission rate shall be calculated as required in 40 CFR 63.4551 and 63.4552 for the compliance period.
- f. If the permittee chooses to use the "compliant coating option" for any coating or a group of coatings, in order to demonstrate compliance with this NESHAP, such coating operation(s) shall not apply any coating with an organic HAP content greater than or equal to the limitation(s) contained in 40 CFR 63.4490; and all the thinners, additives, and cleaning/purge materials applied shall not contain organic HAP. If any individual material, used within a group of materials applied in the "compliant coating operation", exceeds the emission limitation for that



coating group; or a thinner, additive, or cleaning/purge material containing an organic HAP is applied, the mass average organic HAP content for the coating operations must be calculated as required in this permit.

- g. For any coating operation(s) that is meeting the emission limitations in 40 CFR 63.4490 by using the "without add-on control" option, the permittee shall maintain the emissions unit(s) in compliance with the applicable emission limitation at all times, as determined at the end of each month and on a rolling, 12-month basis following the initial compliance period, i.e., the mass average organic HAP emission rate shall be calculated each month as required in 40 CFR 63.4551 and 63.4552.
- h. Table 2 to 40 CFR Part 63, Subpart PPPP shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.
- i. Any emission limits or operational restrictions within this permit pertaining to photochemically reactive materials shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to the restriction of the use of photochemically reactive materials included in c)(2), d)(1)a, d)(1)g.ii., and e)(1)a. shall be void.

c) Operational Restrictions

- (1) The permittee shall operate the paint booth fabric filter system whenever this emissions unit is in operation.  
  
(Authority for term: OAC rule 3745-77-07(A)(1))
- (2) Coatings, reduction solvents and/or cleanup solvents that are Photochemically Reactive Materials as defined in OAC rule 3745-21-01(C)(5) shall not be used in this emission unit.  
  
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
- (3) Cleanup solvent and reduction solvent shall not contain HAP.  
  
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
- (4) Every individual coating used in the "compliant coating operations" must meet the emission limitation(s) contained in 40 CFR 63.4490; and all the thinners, additives, and cleaning/purge materials applied shall not contain organic HAP. Any coating operation meeting these limitations, for each material applied, shall not be required to meet the operating limits in 40 CFR 63.4492 or work practice standards in 40 CFR 63.4493.  
  
(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4492(a) & 40 CFR 63.4493(a))
- (5) The permittee shall operate and maintain, at all times, any emissions unit contained in this permit (including the associated air pollution control equipment and monitoring



equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the operator/permittee reduce emissions to the greatest extent which is consistent with safety and good air pollution control practices. Malfunctions must be corrected as soon as practicable after their occurrence.

The requirement to minimize emissions during any period of startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times, if it is not consistent with safety and good air pollution control practices; nor does it require the operator/permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. The operational and maintenance requirements contained in the NESHAP are enforceable, independent of the emissions limitations or other requirements of the rule.

Determination of whether such operation and maintenance procedures are being applied shall be based on information requested by and made available to the director (appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency), which may include, but shall not be limited to: monitoring results, operation and maintenance procedures (including the startup, shutdown, and malfunction plan or other standard operating procedures), operation and maintenance records, and inspection of the facility.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.6(e)(1))

- (6) If the permittee can meet the emission limitation(s) contained in 40 CFR 63.4490 without add-on controls, by calculating the rolling, 12-month HAP emission rate at the end of each month, the permittee shall not be required to meet the operating limits contained in 40 CFR 63.4492 or work practice standards contained in 40 CFR 63.4493.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4492(a) & 40 CFR 63.4493(a))

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall collect and record the following information for the coating operation:
  - a. the company identification for each coating and reduction solvent, including verification that the coating as applied is not a photochemically reactive material and contains no HAP;
  - b. the number of gallons of each coating employed for each day, as applied;
  - c. the organic compound content of each coating employed, in pounds per gallon as applied;
  - d. The total organic compound emission rate for all coatings as applied, in pounds per day;
  - e. The total number of hours the emissions unit was in operation each day; and



- f. The individual HAP and total HAP content of each coating in pounds per gallon as applied;
- g. for each month, the following information on cleanup solvent:
  - i. the company identification for each cleanup material used;
  - ii. an identification of whether or not each cleanup material employed is photochemically reactive or contains HAP;
  - iii. the gallons of cleanup material used per month;
  - iv. the pounds of OC per gallon of cleanup material;
  - v. the gallons of spent cleanup material recovered for disposal;
  - vi. the pounds of OC per gallon of spent cleanup material; and
  - vii. the pounds per month of OC emissions from cleanup.
- h. For each year, the tons of OC emitted from coating and cleanup.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall collect and record the following information each month for this emissions unit when utilizing the compliant coatings option:

- a. the name and identification number of each coating, thinner (includes any other additives and/or solvent blends), and cleanup/purge material, applied in the plastic parts coating operation(s), including at a minimum:
  - i. information from the supplier or manufacturer,
  - ii. formulation data and/or coating/material testing data,
  - iii. all data, documentation, and/or calculations needed to demonstrate that each coating meets the limits contained in 40 CFR 63.4490 and that each thinner, additive, and cleanup material applied in the plastic parts coating operations contained no organic HAP\*;
- b. the number of gallons or liters of each coating, thinner/additive, and cleanup/purge material employed;
- c. the density of each coating, thinner/additive, and cleanup/purge material employed, in kg/liter or pounds/gallon, determined using ASTM Method D1475-98 or from information provided by the supplier or manufacturer of the material;



- d. the mass fraction of organic Hazardous Air Pollutants (HAP) for each coating, thinner/additive, and cleanup/purge material applied during the month, as a weight fraction, i.e., pound of HAP/pound of coating or kg HAP/kg coating, using one of the following methods:
  - i. Method 311 from 40 CFR Part 63, Appendix A;
  - ii. Method 24 from 40 CFR Part 60, Appendix A if all nonaqueous volatile matter is to be used for the mass fraction of HAP; or
  - iii. information from the supplier or manufacturer of the materials, where the mass fraction of organic HAP can be calculated from the density and the mass of HAP per gallon of each material (pound HAP/gallon of material pounds/gallon of material, or calculated in kg/liter);
- e. the mass fraction of coating solids (pound of coating solids/pound of coating or kg of coating solids /kg coating) for each coating applied, determined using one of the following methods:
  - i. Method 24 from 40 CFR Part 60, Appendix A; or
  - ii. information from the supplier or manufacturer of the coatings, where the mass fraction of coating solids can be calculated from the density and the mass of solids per gallon of each material (pound solids/gallon of coating pounds/gallon of coating, or calculated in kg/kg);
- f. the organic HAP content of each coating, in pound of organic HAP emitted per pound of coating solids used or kg of organic HAP emitted per kg of coating solids used, calculated as follows for each coating applied in the plastic parts coating operations using the "compliant material" option:

$$H_c = W_c / S_c$$

where:

$H_c$  is the organic HAP content of coating "c", in kg organic HAP emitted per kg of coating solids used or pound of organic HAP emitted per pound of coating solids used.

$W_c$  is the mass fraction of organic HAP in coating "c", kg HAP per kg coating or pound of HAP per pound of coating, as determined in (d) above.

$S_c$  is the mass fraction of coating solids in coating "c", kg coating solids per kg coating or pound of coating solids per pound of coating, as determined in (e) above; and

- g. all calculations required by this permit for each rolling 12-month compliance period.

In order to demonstrate continuous compliance, the calculated organic HAP content ( $H_c$ ) for each coating used must be less than or equal to the applicable emission limit in 40 CFR 63.4490; and each thinner and/or other additive, and cleaning material used during the each compliance period (each month) must



contain no organic HAP. These records shall constitute a separate initial compliance demonstration for each coating applied.

Each record shall be maintained for 5 years following the date of the occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on-site for the first two years of this 5-year period of time.

\*No organic HAP means no HAP at 1.0% or more by mass and no HAP defined by the Occupational Safety and Health Administration (OSHA) as a carcinogen, in 29 CFR 1910.1200(d)(4), equal to or greater than 0.1% by mass.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4530, 40 CFR 63.4531, 40 CFR 63.4540, 40 CFR 63.4541, & 40 CFR 63.4542)

- (4) The permittee shall collect and record the following information each month for this emissions unit when utilizing the "without add-on controls" option:
- a. the name and identification number of each coating, thinner (includes any other additives and/or solvent blends), and cleanup/purge material, applied in the plastic parts coating operation(s), including information from the supplier or manufacturer, formulation data, and/or coating/material testing data;
  - b. the number of gallons or liters of each coating, thinner/additive, and cleanup/purge material employed;
  - c. the density of each coating, thinner/additive, and cleanup/purge material employed, in kg/liter or pounds/gallon, determined using ASTM Method D1475-98 or from information provided by the supplier or manufacturer of the material;
  - d. the mass fraction of organic Hazardous Air Pollutants (HAP) for each coating, thinner/additive, and cleanup/purge material applied during the month, as a weight fraction, i.e., pound of HAP/pound of coating or kg HAP/kg coating, using one of the following methods:
    - i. Method 311 from 40 CFR Part 63, Appendix A;
    - ii. Method 24 from 40 CFR Part 60, Appendix A if all nonaqueous volatile matter is to be used for the mass fraction of HAP;
    - iii. information from the supplier or manufacturer of the materials, where the mass fraction of organic HAP can be calculated from the density and the mass of HAP per gallon of each material (pounds HAP/gallon of material pounds/gallon of material, or calculated in kg/liter); or
    - iv. solvent blends listed as single components and where neither test data nor manufacturer's data is available, default values from Table 3 to Subpart PPPP or Table 4 if not listed in Table 3, can be used.
  - e. the mass fraction of coating solids (pound of coating solids/pound of coating or kg of coating solids /kg coating) for each coating applied determined using one of the following methods:
    - i. Method 24 from 40 CFR Part 60, Appendix A; or



- ii. information from the supplier or manufacturer of the coatings, where the mass fraction of coating solids can be calculated from the density and the mass of solids per gallon of each material (pound solids/gallon of coating pounds/gallon of coating, or calculated in kg/kg);
- f. the total mass of organic HAP (pound or kg) in all of the coatings, thinners/additives, and cleanup/purge materials (as purchased) applied during the month, calculated separately for coatings, thinners/additives, and cleanup/purge materials as follows:

$$\text{HAP} = \text{sum} ((\text{VOL}_i) (D_i) (W_i))$$

where:

sum is from  $i=1$  to  $i=r$

HAP is the total mass of organic HAP in the coatings, thinners/additives, and cleanup/purge materials used each month, in pound or kg of HAP for each: 1. the coatings (HAP<sub>c</sub>), 2. thinners/additives (HAP<sub>t</sub>), and 3. cleanup/purge materials (HAP<sub>cu</sub>).

VOL<sub>i</sub> is the volume of material "i" documented in b. above, in gallons or liters.

D<sub>i</sub> is the density of material "i" as documented in c. above, in pounds/gallon or kg/liter.

W<sub>i</sub> is the mass fraction of organic HAP in material "i" as calculated in d. above, in pound/pound or kg/kg.

r is the number of coatings, the number of thinners/additives, or the number of cleanup/purge materials used during the month, each source (coating, thinner/additive, cleanup/purge) calculated separately for its HAP.

- g. the total mass of organic HAP emissions for each month, calculated as follows:

$$\text{HAPTOT} = \text{HAP}_c + \text{HAP}_t + \text{HAP}_{cu} - R_w$$

where:

HAPTOT is the total mass of organic HAP emissions for the month, in pound or kg.

HAP<sub>c</sub> is the total mass of organic HAP in all the coatings used during the month, summed from the total mass of HAP calculated from all the coatings applied, as required in f. above, in pound or kg.

HAP<sub>t</sub> is the total mass of organic HAP in all the thinners and additives used during the month, summed from the total mass of HAP calculated from all the thinners/additives applied, as required in f. above, in pound or kg.



HAP<sub>cu</sub> is the total mass of organic HAP in all cleanup and purge materials used during the month, summed from the total mass of HAP calculated from all the cleanup/purge materials applied, as required in f. above, in pound or kg.

R<sub>w</sub> is the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste treatment, storage, and disposal facility (TSDF) for treatment or disposal during the compliance period, in pound or kg (the value of zero shall be assigned to R<sub>w</sub> if the requirements for the allowance cannot be met, as required in this permit, or if these materials are not collected for recovery or disposal).

- h. the total mass of coating solids applied during the month, calculated as follows:

$$M_s = \sum (VOL_h) (D_h) (M_h)$$

where:

sum is from h=1 to h=m

M<sub>s</sub> is the total mass of coating solids used during the month, in pound or kg.

VOL<sub>h</sub> is the total volume of coating "h" used during the month, as documented in b. above, in gallons or liters.

D<sub>h</sub> is the density of coating "h", as documented in c. above, in pounds/gallon or kg/liter.

M<sub>h</sub> is the mass fraction of coating solids for coating "h", pound of solids per pound of coating or kg of solids per kg coating, calculated as required in e. above.

m is the number of coatings applied during the month.

- i. the total organic HAP emission rate for the 12-month compliance period, in pound of HAP per pound of coating solids or kg of HAP per kg of coating solids applied during the rolling, 12-month compliance period, calculated as follows:

$$HAP_{comply} = \sum (HAPTOT, y) / \sum (M_s, y)$$

where:

sum is from y=1 to y=n

HAP<sub>comply</sub> is the total organic HAP emission rate for the 12-month compliance period, in pound organic HAP emitted per pound of coating solids applied or kg organic HAP emitted per kg of coating solids applied.

HAPTOT, y is the total mass of organic HAP emissions from all materials used during month y, calculated in g. above, in pound or kg.

M<sub>s, y</sub> is the total mass of coating solids used during month y, calculated in h. above, in pound or kg.



y is the identifier for the month.

n is the number of full or partial months in the compliance period; for the initial compliance period, n equals 13 where the compliance date does not fall on the first day of the month; for all following compliance periods n equals 12; and

- j. all calculations required above for each monthly rolling, 12-month compliance period.

In order to demonstrate continuous compliance, the organic HAP emission rate for each rolling, 12-month compliance period must be less than or equal to the applicable emission limit in 40 CFR 63.4490. The compliance demonstration shall be conducted on a monthly basis, using the data from the previous 12 months of operation, as documented through the above calculations and records.

Each record shall be maintained for 5 years following the date of the occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on-site for the first two years of this 5-year period of time.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4530, 40 CFR 63.4531, 40 CFR 63.4550, 40 CFR 63.4551, & 40 CFR 63.4552)

- (5) The permittee shall maintain records to demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable limitation contained in this NESHAP and permit; and that no thinner, additive, and/or cleanup/purge material used in the coating operations contains organic HAP at 1.0% or more by mass and no HAP defined by the Occupational Safety and Health Administration (OSHA) as a carcinogen, in 29 CFR 1910.1200(d)(4), equal to or greater than 0.1% by mass. Each record shall be maintained for 5 years following the date of application of the coating.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4491(a), 40 CFR 63.4541, 40 CFR 63.4542, & 40 CFR 63.4531)

- (6) The permittee shall also maintain the following records for the plastic parts coating line:
  - a. a copy of each notification, report, and the supporting documentation used to demonstrate that each coating met the applicable limitation in 40 CFR 63.4490 or a record of each rolling 12-month calculation of the total mass of organic HAP emissions used to comply with the NESHAP;
  - b. if using the predominant activity alternative under 40 CFR 63.4490(c)(1), the records of the data and calculations used to determine the predominant activity;
  - c. if using the "facility-specific" emission limit under 40 CFR 63.4490(c)(2), the data used to calculate the "facility-specific" emission limit; and
  - d. the date, time, and duration of use, and the amount of any material applied in the compliant coating operations that did not meet the requirements of the "compliant material" option.



If demonstrating compliance with a predominant activity determination or a "facility-specific" emission limit, all coating operations included in the predominant activity determination or calculation of the "facility-specific" emission limit must comply with the applicable limit and requirements for the "compliant material" option.

Each record shall be maintained for 5 years following the date of the occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on-site for the first two years of this 5-year period of time.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or one can be obtained by contacting your Ohio EPA District Office or local air agency contact. Material Safety Data Sheets or VOC data sheets typically include a listing of the solids and solvents contained in the coatings and cleanup/purge materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4530(a) & 40 CFR 63.4531)

- (7) The PTI application for this/these emissions unit(s), K001, was evaluated based on the actual materials and the design parameters of the emissions unit(s)' exhaust system, as specified by the permittee. The  $\Delta$ Toxic Air Contaminant Statute $\Delta$ , ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled  $\Delta$ Review of New Sources of Air Toxic Emissions, Option A $\Delta$ , as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; or
    - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
  - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
  - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e.,  $\Delta$ 24 $\Delta$  hours per day and  $\Delta$ 7 $\Delta$



days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or worst case toxic contaminant(s):

Toxic Contaminant: methyl amyl ketone (MAK)

TLV (mg/m3): 233.50

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 626.2

MAGLC (ug/m3): 5,560

The permittee, has demonstrated that emissions of methyl amyl ketone (MAK), from emissions unit(s) K001, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (8) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or



FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute@, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute@, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute@, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute@, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that include the following information:

- a. any day during which a photochemically reactive material was employed and the OC emissions for each such day;
- b. any day in which a HAP-containing reduction solvent or cleanup material was employed and the individual HAP emissions for each such day;
- c. any month in the quarter during which the rolling twelve month total HAP emissions across all coating operations exceeded 0.16 pounds of HAP per pound of coating solids applied;
- d. any exceedance of VOC emission limits for coating or cleanup, and the amount of such exceedance; and,
- e. if no deviations, report no deviations.



(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit an initial notification of compliance status no later than 30 calendar days following the end of the initial compliance period (documented in the "Additional Terms and Conditions" section of this permit). The initial notification of compliance shall contain the following information for the "compliant coating" option:

- a. company name and address;
- b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);
- c. the date of the report and beginning and ending dates of the reporting period;
- d. identification of each coating operation using the "compliant material" option;
- e. a statement as to whether each coating met the emission limitation for the initial compliance period and if any thinner, additive, and/or cleanup material contained any organic HAP;
- f. if there was a deviation during the initial compliance period, a description of the deviation and statement of the cause and the calculations of emissions used to determine noncompliance with the applicable limits;
- g. calculations and/or supporting documentation (information from supplier or manufacturer or summary of testing results) for the following:
  - i. mass fraction of organic HAP for one representative coating, one thinner and/or additive, and one cleanup/purge material;
  - ii. the mass fraction of coating solids for the representative coating;
  - iii. the density for the representative coating; and
  - iv. the calculation of the organic HAP content for the representative coating, for demonstration of compliance with the limitation, in kg (lb) organic HAP per kg (lb) of coating solids;
- h. if using the predominant activity alternative under 40 CFR 63.4490(c)(1), the data and calculations used to determine the predominant activity; and
- i. if using the "facility-specific emission limit" alternative under 40 CFR 63.4490(c)(2), the calculation of the "facility-specific" emission limitation.



(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.9(h) & 40 CFR 63.4510(c))

- (4) The permittee shall submit semiannual reports which shall be postmarked or delivered no later than July 31 or January 31 following the end of each semiannual reporting period (June 30 or December 31). The first semiannual compliance period shall begin the day after the end of the initial compliance period, as describes in this permit. The semiannual report shall contain the following information:
- a. company name and address;
  - b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);
  - c. the date of the report and beginning and ending dates of the reporting period;
  - d. identification of the compliance method as either the "compliant material" option or the "without add-on control" option;
  - e. statement of whether the affected source achieved the emission limitations for the compliance period;
  - f. the calculation results for each rolling, 12-month organic HAP emission rate during the 6-month reporting period for the uncontrolled coating operations or the limitation from 40 CFR 63.4490 for each type of compliant coating applied;
  - g. if using the predominant activity alternative according to 40 CFR 63.4490(c)(1), the annual determination of predominant activity if it was not included in the previous semi-annual compliance report;
  - h. if using the "facility-specific emission limit" alternative according to 40 CFR 63.4490(c)(2), the calculation of the "facility-specific" emission limit for each 12-month compliance period during the 6-month reporting period;
  - i. if there were no deviations, a statement that there were no deviations from the emissions limitations during the reporting period; and
  - j. if there were any deviations during the compliance period, the report shall include the following information:
    - i. if using the "compliant material" option the report shall include:
      - (a) an identification of each coating used that deviated from the applicable emission limit, and each thinner/additive, and cleaning material used that contained organic HAP and the dates and times each was used;
      - (b) the calculation of the organic HAP content for each coating that deviated from the applicable limit, kg (lb) organic HAP per liter (gallon) of coating solids;



- (c) the determination of the mass fraction of organic HAP for each thinner, additive, and cleaning material used during the time of deviation; and
    - (d) a statement of the cause of each deviation;
  - ii. deviations from coating applications without add-on control shall include the following information:
    - (a) the beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit;
    - (b) the calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred, including emissions from coatings, thinners/additives, and cleaning materials used each month of deviation from the applicable limitation(s);
    - (c) if applicable, the calculation used to determine mass of organic HAP in waste materials; and
    - (d) a statement of the cause of each deviation.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4520(a))

- (5) The permittee shall identify in the semiannual reports any period of time where a coating was applied that exceeded the organic HAP content limitation contained in this NESHAP and/or a thinner, additive, and/or cleaning/purge material was applied that contained organic HAP as defined in this permit. The report shall document the date and duration of the exceedance, as well as the mass average organic HAP content calculation for the compliance period during which the exceedance occurred.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4520(a)(5) & 40 CFR 63.4542(b))

- (6) The permittee shall submit an initial notification of compliance status report no later than 30 calendar days following the end of the initial compliance period (documented in the "Additional Terms and Conditions" of this permit). The initial notification of compliance shall contain the following information for the "without add-on controls" option:
  - a. company name and address;
  - b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);
  - c. the date of the report and beginning and ending dates of the reporting period;
  - d. identification of the compliance method for each coating operation, i.e., if using "compliant materials"; the capture and control device(s) employed and the estimated or demonstrated efficiency of each; a statement as to if cleanup solvents were collected for recovery or disposal and if they were shipped to a



- certified hazardous waste TSDF; and if solvent recovery using liquid-liquid material balance was applied for an emission reduction;
- e. statement of whether the affected source achieved the emission limitations for the initial compliance period;
  - f. if there was a deviation during the initial compliance period, a description of the deviation and statement of the cause and the calculations of emissions used to determine noncompliance with the applicable limitations;
  - g. calculations and supporting documentation for the coatings, thinners, and cleanup materials applied (information from supplier or manufacturer or summary of testing results) and waste materials sent to a hazardous waste TSDF, if used, to include the following:
    - i. mass fraction of organic HAP for one coating, one thinner and/or other additive, and one cleanup/purge material;
    - ii. the mass fraction of coating solids for one coating;
    - iii. density for one coating, one thinner and/or other additive, and one cleanup/purge material; and
    - iv. the average amount of waste materials collected in any month and average mass of organic HAP contained in the waste materials sent off-site to a hazardous waste TSDF;
  - h. for coating operations meeting the emissions limitation without add-on controls, the calculations of the total organic HAP emission rate for the 12-month compliance period, from the coatings, thinners/additives, and cleaning materials used each month, to include:
    - i. the calculations of the total mass of coating solids used each month;
    - ii. the calculations of the total mass of organic HAP emissions for each month; and
    - iii. the calculation of the initial 12-month organic HAP emission rate;
  - i. for coating operations meeting the emissions limitation with add-on controls the calculations of the total organic HAP emission rate for the 12-month compliance period, from the coatings, thinners/additives, and cleaning materials used each month, to include:
    - i. the calculations of the total mass of coating solids used each month;
    - ii. the calculations of the mass of organic HAP emission reduction for each month for the emission capture systems and add-on control devices;
    - iii. the calculations of the mass of organic HAP emission reduction for each month for each coating operation using a solvent recovery system using liquid-liquid material balance;



- iv. the calculations of the total mass of organic HAP emissions for each month; and
  - v. the calculation of the initial 12-month organic HAP emission rate;
  - j. information for the add-on-controls and capture system, excluding the solvent recovery systems using a liquid-liquid material balance (maintained in another term):
    - i. a summary of the data and copies of the calculations supporting the determination that each emissions capture system is a permanent total enclosure or a measurement of the emission capture system's efficiency, including the protocol/procedures followed;
    - ii. a summary of the results of any capture efficiency tests conducted and performance test conducted on each add-on control device; and
    - iii. a list of each emission capture system's and add-on control device's operating limits and summary of the data used to establish these parameter limitations;
  - k. a statement of whether or not the work practice plan was developed and implemented;
  - l. if using the predominant activity alternative under 40 CFR 63.4490(c)(1), the data and calculations used to determine the predominant activity; and
  - m. if using the "facility-specific emission limit" alternative under 40 CFR 63.4490(c)(2), the calculation of the "facility-specific" emission limitation.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.9(h) & 40 CFR 63.4510(c))
- (7) The permittee shall submit or has submitted an initial notification report as required by 40 CFR 63.4510(b). This notification would be submitted as a permit to install for a new source; or for an existing source, this notification should have been submitted by April 19, 2005. The initial notification shall include the following information:
- a. the name and address of the owner or operator;
  - b. the address, i.e., the physical location of the affected source;
  - c. an identification of the relevant standard (NESHAP) that is the basis of the notification and the compliance date;
  - d. a brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant or a preliminary identification of each such point;
  - e. a statement of whether the affected source is a major source or an area source; and



- f. the anticipated startup of the emissions unit following the issuance of the permit (or the date when construction or reconstruction was commenced if prior to the issuance of a permit).

A notification of the actual date of startup of the emissions unit shall be delivered to the appropriate Ohio EPA District Office or local air agency or postmarked within 15 calendar days following the startup date of the affected source.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.9(b), 40 CFR 63.4510(b) & OAC 3745-31-02(A)(1))

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

6.0 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions by the number of actual hours that the emissions unit was in operation that day as recorded in d)(1)d and d)(1)e.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- b. Emission Limitation:

26.28 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

The annual emissions limitation was based on the hourly limit (6.0 pounds per hour) multiplied by 8760 hours per year and divided by 2000 pounds per ton. Therefore, compliance with the hourly emission limitation serves as demonstration of compliance for the annual emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- c. Emission Limitation:

104.9 pounds of OC per month from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(1)g. Compliance shall be determined based upon the following equation:

$$E_s = V_s * C_s - V_w * C_w,$$



where:

Es = The pounds of VOC emissions from cleanup per month.

Vs = The gallons of cleanup solvent used per month.

Cs = The pounds of VOC per gallon of cleanup solvent.

Vw = The gallons of spent cleanup solvent recovered for waste disposal.

Cw = The pounds of VOC per gallon of spent cleanup solvent.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

0.63 tons of VOC per year from cleanup materials.

Applicable Compliance Method:

The annual emissions limitation was based on the monthly limit (104.9 pounds VOC per month) multiplied by 12 months per year and divided by 2000 pounds per ton. Therefore, compliance with the monthly emission limitation serves as demonstration of compliance for the annual emission limitation.

e. Emission Limitation:

VE shall not exceed 20% opacity of visible PE, as a 6-minute average.

Applicable Compliance Method:

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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

f. Emission Limitation:

0.551 pound of PE per hour.

Applicable Compliance Method:

To determine the worst case PE rate, the following equation shall be used:

$$E = \text{maximum coating solids usage rate, in pounds per hour,} \times (1-TE) \times (1-CE)$$

where:

E = PE rate (lbs/hr);

TE = fractional transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (0.55); and



CE = fractional control efficiency of the control equipment (0.99).

When requested by the Ohio EPA, the permittee shall demonstrate compliance with the above emissions limitation pursuant to OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

0.16 pounds of HAP per pound of coatings solids

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods set forth in 40 CFR 63 Subpart PPPP under the "compliant coatings" or "emission rate without add-on controls" options, as appropriate.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.4551)

g) Miscellaneous Requirements

(1) None.



**2. K002, Custom Paint Line**

**Operations, Property and/or Equipment Description:**

Custom Paint Line

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

(1) d)(7) through d)(9)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	K002 - Coating Line for fiberglass reinforced pultruded styrene resin	
a.	OAC rule 3745-31-05(D) (PTI 04-01457, issued 12/5/2006)	See 2. through 4. of Section B.
b.	40 CFR Part 63 Subpart PPPP	Organic HAP emissions from all coating operations onsite shall not exceed 0.16 pounds of organic HAP emissions per pound of coating solids applied during each 12-month compliance period.  See c)(3) and b)(2)b through b)(2)(c).
c.	40 CFR Part 63 Subpart A	See b)(2)c.
d.	OAC rule 3745-17-07(A)(1)	Visible emissions (VE) from this emissions unit shall not exceed 20% opacity as a 6-minute average.
e.	OAC rule 3745-17-11(B)(1)	Particulate Emissions (PE) shall not exceed 0.551 pound per hour.
f.	OAC rule 3745-21-07(G)(2)	Organic Compound (OC) emissions shall not exceed 8.0 pounds per hour and 40.0 pounds per day. See b)(2)d.
g.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)a.
h.	OAC rule 3745-114	See d)(7) through d)(9)

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) does not apply to the uncontrolled particulate and OC emissions from this air contaminant source since the potential to emit for particulate and OC emissions is less than ten tons per year.



- b. The permittee shall comply with the applicable provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Plastic Parts and Products, as promulgated by the United States Environmental Protection Agency under 40 CFR Part 63, Subpart PPPP.

The final rules found in 40 CFR Part 63, Subpart PPPP establish national emission standards for hazardous air pollutants (HAP), work practice standards, operating limitations, and compliance requirements for plastic parts coating operations. The affected source is the collection of all of the following operations for or from the surface coating of plastic parts and products:

- i. all coating operations as defined in 40 CFR 63.4581;
- ii. all storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
- iii. all manual and automated equipment and containers used for conveying coatings, thinners, other additives, purge, and cleaning materials; and
- iv. all storage containers and all manual and automated equipment and containers used for conveying waste materials generated by the coating operations.

The permittee shall be subject to the requirements and limitations of this NESHAP on December 5, 2007, at which time the initial compliance period begins for the coating operations; and the initial compliance period ends on December 30, 2008.

The permittee, using the "compliant material" option, shall not apply any coating in the coating operation(s) with an organic HAP content greater than or equal to the limitation(s) contained in 40 CFR 63.4490; and all the thinners, additives, and cleaning/purge materials applied shall not contain organic HAP. If any individual coating applied does not meet the limitation of the rule, or any thinner, additive, and/or cleaning/purge material contains organic HAP, the mass average organic HAP emission rate shall be calculated as required in 40 CFR 63.4551 and 63.4552 for the compliance period.

If the permittee chooses to use the "compliant coating option" for any coating or a group of coatings, in order to demonstrate compliance with this NESHAP, such coating operation(s) shall not apply any coating with an organic HAP content greater than or equal to the limitation(s) contained in 40 CFR 63.4490; and all the thinners, additives, and cleaning/purge materials applied shall not contain organic HAP. If any individual material, used within a group of materials applied in the "compliant coating operation", exceeds the emission limitation for that coating group; or a thinner, additive, or cleaning/purge material containing an organic HAP is applied, the mass average organic HAP content for the coating operations must be calculated as required in this permit.

For any coating operation(s) that is meeting the emission limitations in 40 CFR 63.4490 by using the "without add-on control" option, the permittee shall maintain the emissions unit(s) in compliance with the applicable emission limitation at all times, as determined at the end of each month and on a rolling, 12-month basis



following the initial compliance period, i.e., the mass average organic HAP emission rate shall be calculated each month as required in 40 CFR 63.4551 and 63.4552.

- c. Table 2 to 40 CFR Part 63, Subpart PPPP shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.
- d. All OC emissions in this unit are assumed to be VOC emissions.

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 8 pounds per hour and 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(1), e)(2)a., e)(2)c., f)(1)d. shall be void.

c) Operational Restrictions

- (1) The permittee shall operate the paint booth fabric filter system whenever this emissions unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) Cleanup solvents that are photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5) shall not be used in this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(D))

- (3) Cleanup solvent and reduction solvent shall not contain HAP.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(D))

- (4) Every individual coating used in the "compliant coating operations" must meet the emission limitation(s) contained in 40 CFR 63.4490; and all the thinners, additives, and cleaning/purge materials applied shall not contain organic HAP. Any coating operation meeting these limitations, for each material applied, shall not be required to meet the operating limits in 40 CFR 63.4492 or work practice standards in 40 CFR 63.4493.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4492(a) & 40 CFR 63.4493(a))

- (5) The permittee shall operate and maintain, at all times, any emissions unit contained in this permit (including the associated air pollution control equipment and monitoring equipment) in a manner consistent with safety and good air pollution control practices for



minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the operator/permittee reduce emissions to the greatest extent which is consistent with safety and good air pollution control practices. Malfunctions must be corrected as soon as practicable after their occurrence.

The requirement to minimize emissions during any period of startup, shutdown, or malfunction does not require the permittee to achieve emission levels that would be required by the applicable standard at other times, if it is not consistent with safety and good air pollution control practices; nor does it require the operator/permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. The operational and maintenance requirements contained in the NESHAP are enforceable, independent of the emissions limitations or other requirements of the rule.

Determination of whether such operation and maintenance procedures are being applied shall be based on information requested by and made available to the director (appropriate Ohio EPA Division of Air Pollution Control District Office or local air agency), which may include, but shall not be limited to: monitoring results, operation and maintenance procedures (including the startup, shutdown, and malfunction plan or other standard operating procedures), operation and maintenance records, and inspection of the facility.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.6(e)(1))

- (6) If the permittee can meet the emission limitation(s) contained in 40 CFR 63.4490 without add-on controls, by calculating the rolling, 12-month HAP emission rate at the end of each month, the permittee shall not be required to meet the operating limits contained in 40 CFR 63.4492 or work practice standards contained in 40 CFR 63.4493.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4492(a) & 40 CFR 63.4493(a))

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall collect and record the following information for the coating operation:
  - a. the company identification for each coating and reduction solvent, including verification that the coating as applied is not a photochemically reactive material and contains no HAP;
  - b. the number of gallons of each coating employed for each day, as applied;
  - c. the organic compound content of each coating employed, in pounds per gallon as applied;
  - d. The total organic compound emission rate for all coatings as applied, in pounds per day;
  - e. The total number of hours the emissions unit was in operation each day; and
  - f. The individual HAP and total HAP content of each coating in pounds per gallon as applied;



- g. for each month, the following information on cleanup solvent:
  - i. the company identification for each cleanup material used;
  - ii. an identification of whether or not each cleanup material employed is photochemically reactive or contains HAP;
  - iii. the gallons of cleanup material used per month;
  - iv. the pounds of OC per gallon of cleanup material;
  - v. the gallons of spent cleanup material recovered for disposal;
  - vi. the pounds of OC per gallon of spent cleanup material; and
  - vii. the pounds per month of OC emissions from cleanup.
- h. For each year, the tons of OC emitted from coating and cleanup.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, the d)(1)a reference to photochemically reactive material will be voided entirely.]

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-07(G))

- (2) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall collect and record the following information each month for this emissions unit when utilizing the compliant coating option:
  - a. the name and identification number of each coating, thinner (includes any other additives and/or solvent blends), and cleanup/purge material, applied in the plastic parts coating operation(s), including at a minimum:
    - i. information from the supplier or manufacturer,
    - ii. formulation data and/or coating/material testing data,
    - iii. all data, documentation, and/or calculations needed to demonstrate that each coating meets the limits contained in 40 CFR 63.4490 and that each thinner, additive, and cleanup material applied in the plastic parts coating operations contained no organic HAP\*;
  - b. the number of gallons or liters of each coating, thinner/additive, and cleanup/purge material employed;
  - c. the density of each coating, thinner/additive, and cleanup/purge material employed, in kg/liter or pounds/gallon, determined using ASTM Method D1475-98 or from information provided by the supplier or manufacturer of the material;



- d. the mass fraction of organic Hazardous Air Pollutants (HAP) for each coating, thinner/additive, and cleanup/purge material applied during the month, as a weight fraction, i.e., pound of HAP/pound of coating or kg HAP/kg coating, using one of the following methods:
  - i. Method 311 from 40 CFR Part 63, Appendix A;
  - ii. Method 24 from 40 CFR Part 60, Appendix A if all nonaqueous volatile matter is to be used for the mass fraction of HAP; or
  - iii. information from the supplier or manufacturer of the materials, where the mass fraction of organic HAP can be calculated from the density and the mass of HAP per gallon of each material (pound HAP/gallon of material pounds/gallon of material, or calculated in kg/liter);
- e. the mass fraction of coating solids (pound of coating solids/pound of coating or kg of coating solids /kg coating) for each coating applied, determined using one of the following methods:
  - i. Method 24 from 40 CFR Part 60, Appendix A; or
  - ii. information from the supplier or manufacturer of the coatings, where the mass fraction of coating solids can be calculated from the density and the mass of solids per gallon of each material (pound solids/gallon of coating pounds/gallon of coating, or calculated in kg/kg);
- f. the organic HAP content of each coating, in pound of organic HAP emitted per pound of coating solids used or kg of organic HAP emitted per kg of coating solids used, calculated as follows for each coating applied in the plastic parts coating operations using the "compliant material" option:

$$H_c = W_c / S_c$$

where:

H<sub>c</sub> is the organic HAP content of coating "c", in kg organic HAP emitted per kg of coating solids used or pound of organic HAP emitted per pound of coating solids used.

W<sub>c</sub> is the mass fraction of organic HAP in coating "c", kg HAP per kg coating or pound of HAP per pound of coating, as determined in d. above.

S<sub>c</sub> is the mass fraction of coating solids in coating "c", kg coating solids per kg coating or pound of coating solids per pound of coating, as determined in e. above; and

- g. all calculations required by this permit for each rolling 12-month compliance period.

In order to demonstrate continuous compliance, the calculated organic HAP content (H<sub>c</sub>) for each coating used must be less than or equal to the applicable emission limit in 40 CFR 63.4490; and each thinner and/or other additive, and cleaning material used during the each compliance period (each month) must



contain no organic HAP. These records shall constitute a separate initial compliance demonstration for each coating applied.

Each record shall be maintained for 5 years following the date of the occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on-site for the first two years of this 5-year period of time.

\*No organic HAP means no HAP at 1.0% or more by mass and no HAP defined by the Occupational Safety and Health Administration (OSHA) as a carcinogen, in 29 CFR 1910.1200(d)(4), equal to or greater than 0.1% by mass.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4530, 40 CFR 63.4531, 40 CFR 63.4540, 40 CFR 63.4541, & 40 CFR 63.4542)

- (4) The permittee shall collect and record the following information each month for this emissions unit when utilizing the "without add-on controls" option:
- a. the name and identification number of each coating, thinner (includes any other additives and/or solvent blends), and cleanup/purge material, applied in the plastic parts coating operation(s), including information from the supplier or manufacturer, formulation data, and/or coating/material testing data;
  - b. the number of gallons or liters of each coating, thinner/additive, and cleanup/purge material employed;
  - c. the density of each coating, thinner/additive, and cleanup/purge material employed, in kg/liter or pounds/gallon, determined using ASTM Method D1475-98 or from information provided by the supplier or manufacturer of the material;
  - d. the mass fraction of organic Hazardous Air Pollutants (HAP) for each coating, thinner/additive, and cleanup/purge material applied during the month, as a weight fraction, i.e., pound of HAP/pound of coating or kg HAP/kg coating, using one of the following methods:
    - i. Method 311 from 40 CFR Part 63, Appendix A;
    - ii. Method 24 from 40 CFR Part 60, Appendix A if all nonaqueous volatile matter is to be used for the mass fraction of HAP;
    - iii. information from the supplier or manufacturer of the materials, where the mass fraction of organic HAP can be calculated from the density and the mass of HAP per gallon of each material (pounds HAP/gallon of material pounds/gallon of material, or calculated in kg/liter); or
    - iv. solvent blends listed as single components and where neither test data nor manufacturer's data is available, default values from Table 3 to Subpart PPPP or Table 4 if not listed in Table 3, can be used.
  - e. the mass fraction of coating solids (pound of coating solids/pound of coating or kg of coating solids /kg coating) for each coating applied determined using one of the following methods:
    - i. Method 24 from 40 CFR Part 60, Appendix A; or



- ii. information from the supplier or manufacturer of the coatings, where the mass fraction of coating solids can be calculated from the density and the mass of solids per gallon of each material (pound solids/gallon of coating pounds/gallon of coating, or calculated in kg/kg);
- f. the total mass of organic HAP (pound or kg) in all of the coatings, thinners/additives, and cleanup/purge materials (as purchased) applied during the month, calculated separately for coatings, thinners/additives, and cleanup/purge materials as follows:

$$\text{HAP} = \text{sum} ((\text{VOL}_i) (D_i) (W_i))$$

where:

sum is from  $i=1$  to  $i=r$

HAP is the total mass of organic HAP in the coatings, thinners/additives, and cleanup/purge materials used each month, in pound or kg of HAP for each: 1. the coatings (HAP<sub>c</sub>), 2. thinners/additives (HAP<sub>t</sub>), and 3. cleanup/purge materials (HAP<sub>cu</sub>).

VOL<sub>i</sub> is the volume of material "i" documented in b. above, in gallons or liters.

D<sub>i</sub> is the density of material "i" as documented in c. above, in pounds/gallon or kg/liter.

W<sub>i</sub> is the mass fraction of organic HAP in material "i" as calculated in d. above, in pound/pound or kg/kg.

r is the number of coatings, the number of thinners/additives, or the number of cleanup/purge materials used during the month, each source (coating, thinner/additive, cleanup/purge) calculated separately for its HAP.

- g. the total mass of organic HAP emissions for each month, calculated as follows:

$$\text{HAPTOT} = \text{HAP}_c + \text{HAP}_t + \text{HAP}_{cu} - R_w$$

where:

HAPTOT is the total mass of organic HAP emissions for the month, in pound or kg.

HAP<sub>c</sub> is the total mass of organic HAP in all the coatings used during the month, summed from the total mass of HAP calculated from all the coatings applied, as required in f. above, in pound or kg.

HAP<sub>t</sub> is the total mass of organic HAP in all the thinners and additives used during the month, summed from the total mass of HAP calculated from all the thinners/additives applied, as required in f. above, in pound or kg.



HAP<sub>cu</sub> is the total mass of organic HAP in all cleanup and purge materials used during the month, summed from the total mass of HAP calculated from all the cleanup/purge materials applied, as required in f. above, in pound or kg.

R<sub>w</sub> is the total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste treatment, storage, and disposal facility (TSDF) for treatment or disposal during the compliance period, in pound or kg (the value of zero shall be assigned to R<sub>w</sub> if the requirements for the allowance cannot be met, as required in this permit, or if these materials are not collected for recovery or disposal).

- h. the total mass of coating solids applied during the month, calculated as follows:

$$M_s = \sum (VOL_h) (D_h) (M_h)$$

where:

sum is from h=1 to h=m

M<sub>s</sub> is the total mass of coating solids used during the month, in pound or kg.

VOL<sub>h</sub> is the total volume of coating "h" used during the month, as documented in (b) above, in gallons or liters.

D<sub>h</sub> is the density of coating "h", as documented in c. above, in pounds/gallon or kg/liter.

M<sub>h</sub> is the mass fraction of coating solids for coating "h", pound of solids per pound of coating or kg of solids per kg coating, calculated as required in (e) above.

m is the number of coatings applied during the month.

- i. the total organic HAP emission rate for the 12-month compliance period, in pound of HAP per pound of coating solids or kg of HAP per kg of coating solids applied during the rolling, 12-month compliance period, calculated as follows:

$$HAP_{comply} = \sum (HAPTOT, y) / \sum (M_s, y)$$

where:

sum is from y=1 to y=n

HAP<sub>comply</sub> is the total organic HAP emission rate for the 12-month compliance period, in pound organic HAP emitted per pound of coating solids applied or kg organic HAP emitted per kg of coating solids applied.

HAPTOT, y is the total mass of organic HAP emissions from all materials used during month y, calculated in g. above, in pound or kg.

M<sub>s, y</sub> is the total mass of coating solids used during month y, calculated in h. above, in pound or kg.



y is the identifier for the month.

n is the number of full or partial months in the compliance period; for the initial compliance period, n equals 13 where the compliance date does not fall on the first day of the month; for all following compliance periods n equals 12; and

- j. all calculations required above for each monthly rolling, 12-month compliance period.

In order to demonstrate continuous compliance, the organic HAP emission rate for each rolling, 12-month compliance period must be less than or equal to the applicable emission limit in 40 CFR 63.4490. The compliance demonstration shall be conducted on a monthly basis, using the data from the previous 12 months of operation, as documented through the above calculations and records.

Each record shall be maintained for 5 years following the date of the occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on-site for the first two years of this 5-year period of time.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4530, 40 CFR 63.4531, 40 CFR 63.4550, 40 CFR 63.4551, & 40 CFR 63.4552)

- (5) The permittee shall maintain records to demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable limitation contained in this NESHAP and permit; and that no thinner, additive, and/or cleanup/purge material used in the coating operations contains organic HAP at 1.0% or more by mass and no HAP defined by the Occupational Safety and Health Administration (OSHA) as a carcinogen, in 29 CFR 1910.1200(d)(4), equal to or greater than 0.1% by mass. Each record shall be maintained for 5 years following the date of application of the coating.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4491(a), 40 CFR 63.4541, 40 CFR 63.4542, & 40 CFR 63.4531)

- (6) The permittee shall also maintain the following records for the plastic parts coating line:
  - a. a copy of each notification, report, and the supporting documentation used to demonstrate that each coating met the applicable limitation in 40 CFR 63.4490 or a record of each rolling 12-month calculation of the total mass of organic HAP emissions used to comply with the NESHAP;
  - b. if using the predominant activity alternative under 40 CFR 63.4490(c)(1), the records of the data and calculations used to determine the predominant activity;
  - c. if using the "facility-specific" emission limit under 40 CFR 63.4490(c)(2), the data used to calculate the "facility-specific" emission limit; and
  - d. the date, time, and duration of use, and the amount of any material applied in the compliant coating operations that did not meet the requirements of the "compliant material" option.



If demonstrating compliance with a predominant activity determination or a "facility-specific" emission limit, all coating operations included in the predominant activity determination or calculation of the "facility-specific" emission limit must comply with the applicable limit and requirements for the "compliant material" option.

Each record shall be maintained for 5 years following the date of the occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on-site for the first two years of this 5-year period of time.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or one can be obtained by contacting your Ohio EPA District Office or local air agency contact. Material Safety Data Sheets or VOC data sheets typically include a listing of the solids and solvents contained in the coatings and cleanup/purge materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4530(a) & 40 CFR 63.4531)

- (7) The PTI application for this/these emissions unit(s), K002, was evaluated based on the actual materials and the design parameters of the emissions unit(s)' exhaust system, as specified by the permittee. The  $\Delta$ Toxic Air Contaminant Statute $\Delta$ , ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled  $\Delta$ Review of New Sources of Air Toxic Emissions, Option A $\Delta$ , as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; or
    - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
  - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
  - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e.,  $\Delta$ 24 $\Delta$  hours per day and  $\Delta$ 7 $\Delta$



days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or worst case toxic contaminant(s):

Toxic Contaminant: methyl amyl ketone (MAK)

TLV (mg/m<sup>3</sup>): 233.50

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 626.2

MAGLC (ug/m<sup>3</sup>): 5,560

The permittee, has demonstrated that emissions of methyl amyl ketone (MAK), from emissions unit(s) K002, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (8) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the Toxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or



FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute@, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute@, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute@, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute@, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

(1) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

(2) The permittee shall submit quarterly deviation (excursion) reports that include the following information:

- a. any exceedance of the OC emission limits for coatings and cleanup materials and the OC emissions for each such day;
- b. any day in which a HAP-containing reduction solvent or cleanup material was employed and the individual HAP emissions for each such day;



- c. any time a photochemically reactive material was used as a cleanup solvent and the OC emissions resulting from this material for each such day; and
- d. any month in the quarter during which the rolling twelve month total HAP emissions across all coating operations exceeded 0.16 pounds of HAP per pound of coating solids applied;
- e. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

(3) The permittee shall submit an initial notification of compliance status no later than 30 calendar days following the end of the initial compliance period (documented in the "Additional Terms and Conditions" of this permit). The initial notification of compliance shall contain the following information for the "compliant coating" option:

- a. company name and address;
- b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);
- c. the date of the report and beginning and ending dates of the reporting period;
- d. identification of each coating operation using the "compliant material" option;
- e. a statement as to whether each coating met the emission limitation for the initial compliance period and if any thinner, additive, and/or cleanup material contained any organic HAP;
- f. if there was a deviation during the initial compliance period, a description of the deviation and statement of the cause and the calculations of emissions used to determine noncompliance with the applicable limits;
- g. calculations and/or supporting documentation (information from supplier or manufacturer or summary of testing results) for the following:
  - i. mass fraction of organic HAP for one representative coating, one thinner and/or additive, and one cleanup/purge material;
  - ii. the mass fraction of coating solids for the representative coating;
  - iii. the density for the representative coating; and
  - iv. the calculation of the organic HAP content for the representative coating, for demonstration of compliance with the limitation, in kg (lb) organic HAP per kg (lb) of coating solids;
- h. if using the predominant activity alternative under 40 CFR 63.4490(c)(1), the data and calculations used to determine the predominant activity; and
- i. if using the "facility-specific emission limit" alternative under 40 CFR 63.4490(c)(2), the calculation of the "facility-specific" emission limitation.



(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.9(h) & 40 CFR 63.4510(c))

- (4) The permittee shall submit semiannual reports which shall be postmarked or delivered no later than July 31 or January 31 following the end of each semiannual reporting period (June 30 or December 31). The first semiannual compliance period shall begin the day after the end of the initial compliance period, as describes in this permit. The semiannual report shall contain the following information:
- a. company name and address;
  - b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);
  - c. the date of the report and beginning and ending dates of the reporting period;
  - d. identification of the compliance method as either the "compliant material" option or the "without add-on control" option;
  - e. statement of whether the affected source achieved the emission limitations for the compliance period;
  - f. the calculation results for each rolling, 12-month organic HAP emission rate during the 6-month reporting period for the uncontrolled coating operations or the limitation from 40 CFR 63.4490 for each type of compliant coating applied;
  - g. if using the predominant activity alternative according to 40 CFR 63.4490(c)(1), the annual determination of predominant activity if it was not included in the previous semi-annual compliance report;
  - h. if using the "facility-specific emission limit" alternative according to 40 CFR 63.4490(c)(2), the calculation of the "facility-specific" emission limit for each 12-month compliance period during the 6-month reporting period;
  - i. if there were no deviations, a statement that there were no deviations from the emissions limitations during the reporting period; and
  - j. if there were any deviations during the compliance period, the report shall include the following information:
    - i. if using the "compliant material" option the report shall include:
      - (a) an identification of each coating used that deviated from the applicable emission limit, and each thinner/additive, and cleaning material used that contained organic HAP and the dates and times each was used;
      - (b) the calculation of the organic HAP content for each coating that deviated from the applicable limit, kg (lb) organic HAP per liter (gallon) of coating solids;



- (c) the determination of the mass fraction of organic HAP for each thinner, additive, and cleaning material used during the time of deviation; and
  - (d) a statement of the cause of each deviation;
- ii. deviations from coating applications without add-on control shall include the following information:
- (a) the beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit;
  - (b) the calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred, including emissions from coatings, thinners/additives, and cleaning materials used each month of deviation from the applicable limitation(s);
  - (c) if applicable, the calculation used to determine mass of organic HAP in waste materials; and
  - (d) a statement of the cause of each deviation.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4520(a))

- (5) The permittee shall identify in the semiannual reports any period of time where a coating was applied that exceeded the organic HAP content limitation contained in this NESHAP and/or a thinner, additive, and/or cleaning/purge material was applied that contained organic HAP as defined in this permit. The report shall document the date and duration of the exceedance, as well as the mass average organic HAP content calculation for the compliance period during which the exceedance occurred.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.4520(a)(5) & 40 CFR 3.4542(b))

- (6) The permittee shall submit an initial notification of compliance status report no later than 30 calendar days following the end of the initial compliance period (documented in the "Additional Terms and Conditions" of this permit). The initial notification of compliance shall contain the following information for the "without add-on controls" option:
- a. company name and address;
  - b. statement by a responsible official certifying the truth, accuracy, and completeness of the content of the report (official's name, title, and signature);
  - c. the date of the report and beginning and ending dates of the reporting period;
  - d. identification of the compliance method for each coating operation, i.e., if using "compliant materials"; the capture and control device(s) employed and the estimated or demonstrated efficiency of each; a statement as to if cleanup solvents were collected for recovery or disposal and if they were shipped to a



- certified hazardous waste TSDF; and if solvent recovery using liquid-liquid material balance was applied for an emission reduction;
- e. statement of whether the affected source achieved the emission limitations for the initial compliance period;
  - f. if there was a deviation during the initial compliance period, a description of the deviation and statement of the cause and the calculations of emissions used to determine noncompliance with the applicable limitations;
  - g. calculations and supporting documentation for the coatings, thinners, and cleanup materials applied (information from supplier or manufacturer or summary of testing results) and waste materials sent to a hazardous waste TSDF, if used, to include the following:
    - i. mass fraction of organic HAP for one coating, one thinner and/or other additive, and one cleanup/purge material;
    - ii. the mass fraction of coating solids for one coating;
    - iii. density for one coating, one thinner and/or other additive, and one cleanup/purge material; and
    - iv. the average amount of waste materials collected in any month and average mass of organic HAP contained in the waste materials sent off-site to a hazardous waste TSDF;
  - h. for coating operations meeting the emissions limitation without add-on controls, the calculations of the total organic HAP emission rate for the 12-month compliance period, from the coatings, thinners/additives, and cleaning materials used each month, to include:
    - i. the calculations of the total mass of coating solids used each month;
    - ii. the calculations of the total mass of organic HAP emissions for each month; and
    - iii. the calculation of the initial 12-month organic HAP emission rate;
  - i. for coating operations meeting the emissions limitation with add-on controls the calculations of the total organic HAP emission rate for the 12-month compliance period, from the coatings, thinners/additives, and cleaning materials used each month, to include:
    - i. the calculations of the total mass of coating solids used each month;
    - ii. the calculations of the mass of organic HAP emission reduction for each month for the emission capture systems and add-on control devices;
    - iii. the calculations of the mass of organic HAP emission reduction for each month for each coating operation using a solvent recovery system using liquid-liquid material balance;



- iv. the calculations of the total mass of organic HAP emissions for each month; and
- v. the calculation of the initial 12-month organic HAP emission rate;
- j. information for the add-on-controls and capture system, excluding the solvent recovery systems using a liquid-liquid material balance (maintained in another term):
  - i. a summary of the data and copies of the calculations supporting the determination that each emissions capture system is a permanent total enclosure or a measurement of the emission capture system's efficiency, including the protocol/procedures followed;
  - ii. a summary of the results of any capture efficiency tests conducted and performance test conducted on each add-on control device; and
  - iii. a list of each emission capture system's and add-on control device's operating limits and summary of the data used to establish these parameter limitations;
- k. a statement of whether or not the work practice plan was developed and implemented;
- l. if using the predominant activity alternative under 40 CFR 63.4490(c)(1), the data and calculations used to determine the predominant activity; and
- m. if using the "facility-specific emission limit" alternative under 40 CFR 63.4490(c)(2), the calculation of the "facility-specific" emission limitation.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.9(h) & 40 CFR 63.4510(c))

- (7) The permittee shall submit or has submitted an initial notification report as required by 40 CFR 63.4510(b). This notification would be submitted as a permit to install for a new source; or for an existing source, this notification should have been submitted by April 19, 2005. The initial notification shall include the following information:
  - a. the name and address of the owner or operator;
  - b. the address, i.e., the physical location of the affected source;
  - c. an identification of the relevant standard (NESHAP) that is the basis of the notification and the compliance date;
  - d. a brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant or a preliminary identification of each such point;
  - e. a statement of whether the affected source is a major source or an area source; and



- f. the anticipated startup of the emissions unit following the issuance of the permit (or the date when construction or reconstruction was commenced if prior to the issuance of a permit).

A notification of the actual date of startup of the emissions unit shall be delivered to the appropriate Ohio EPA District Office or local air agency or postmarked within 15 calendar days following the startup date of the affected source.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR 63.9(b), 40 CFR 63.4510(b) & OAC 3745-31-02(A)(1))

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

VE shall not exceed 20% opacity 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

- b. Emission Limitation:

0.551 lb PE/hour

Applicable Compliance Method:

To determine the worst case PE rate, the following equation shall be used:

$$E = \text{maximum coating solids usage rate, in pounds per hour,} \times (1-TE) \times (1-CE)$$

where:

E = PE rate (lbs/hr);

TE = fractional transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (0.55); and

CE = fractional control efficiency of the control equipment (0.99).

When requested by the Ohio EPA, the permittee shall demonstrate compliance with the above emissions limitation pursuant to OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))



c. Emission Limitation:

0.16 pounds of organic HAP emissions per pound of coating solids for any coating material used during each 12-month compliance period.

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods set forth in 40 CFR 63 Subpart PPPP under the "compliant coatings" or "emission rate without add-on controls" options, as appropriate.

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR 63.4551)

d. Emission Limitation:

8.0 pounds per hour and 40 pounds per day of OC emissions

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(1). The total OC emissions rate for all coating applied, in pounds per day, as recorded in d)(1)d. shall not exceed 40 pounds per day. The total OC emissions rate for all coating applied, in pounds per day, as recorded in d)(1)d divided by 24 hours per day shall not exceed 8.0 per hour on an average.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)d. shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

g) Miscellaneous Requirements

(1) None.



**3. P001, Mixer 1**

**Operations, Property and/or Equipment Description:**

Mixer 1

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

(1) d)(5) through d)(7)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P001 - Resin Blending Mixer 1		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01457, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions, excluding emissions from non-VOC, non-photochemically reactive clean-up materials, shall not exceed 3.75 pounds per hour, 90.00 pounds per day, and 16.43 tons per year. See b)(2)a.  OC emissions from clean-up materials from all mixing and pultrusion lines at the facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(A)(3)(ii) (PTI 04-01454, issued 12/5/2006)	Particulate Emissions (PE) shall be less than 10.0 tons per year. See b)(2)b.
c.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
d.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a mixing operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(3).
e.	40 CFR Part 63, Subpart A	See b)(2)c.
f.	OAC rule 3745-17-07(A)	Visible Emissions (VE) from this emission



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		unit shall not exceed 20% opacity as a 6-minute average.
g.	OAC rule 3745-17-11(B)	PE shall not exceed 2.58 pounds per hour.
h.	OAC rule 3745-114	See d)(5) through d)(7)

(2) Additional Terms and Conditions

- a. The VOC emissions from the mixing operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).
- b. Permit to Install 04-01457 for this air contaminant source takes into account the use of a fabric filter system, whenever this air contaminant source is in operation, with a minimum control efficiency of 99%, by weight for PE, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).
- c. Table 15 to 40 CFR Part 63 Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.
- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emissions unit is in operation.  
(Authority for term: OAC rule 3745-77-07(A)(1))
- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (eg. acetone) for cleanup of this emission unit.  
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
- (3) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:
  - a. 63.5808(b) - Table 4 - work practice standards  
(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:



- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emission unit:

- a. the company identification of each resin employed;
- b. the weight of each resin employed in pounds;
- c. the VOC content of each resin employed (e.g. styrene), in percent by weight;
- d. the individual HAP and total HAP content of each resin employed, in pounds per gallon;
- e. the total VOC emission rate for all resin employed (eg. styrene), calculated as required in f)(1)b., in pounds per day;
- f. the actual number of hours that the emissions unit was in operation;
- g. the average, hourly VOC emission rate for all resins employed (e.g. styrene), calculated by e./f., in average, pounds per hour; and
- h. the daily and hourly (average) VOC emissions rate are to be calculated by no later than the first week of the following month from which information was collected for this emission unit.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for the month (total plantwide), except for cleanup on coating lines:



- a. the company identification for each cleanup material employed;
- b. an identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
- c. the volume of each cleanup material applied in gallons;
- d. the OC content of each cleanup material applied in pounds per gallon;
- e. the total OC emissions rate for all cleanup material, in pounds per month, calculated as required in f)(1)d.;
- f. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month (all used is assumed to evaporate);
- g. the monthly OC emission rate is calculated by no later than the first week of the following month from which the information was collected for this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:
  - a. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (5) The PTI application for this/these emissions unit(s), P001, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>@</sup>, as follows:
  - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>@</sup>; or



- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or worst case toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P001, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (6) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and



- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports which include the following information:
  - a. the identification of each day during which the VOC emissions, excluding cleanup materials, from this emission unit exceeded 3.75 pounds per hour or 16.43 tons per year, and the actual VOC emissions for each such time period;



- b. the identification of each day during which the VOC emissions, excluding cleanup materials, from this emission unit exceeded 90.00 pounds per day, and the actual VOC emissions for each such day;
- c. an identification of each month during which the combined OC emissions, from cleanup materials from all emission units located at this facility other than the coating lines, exceeded 2.18 tons per month facility wide, and the actual OC emissions for each such month;
- d. an identification of each month during which a HAP, a VOC, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented; and
- g. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:
  - a. 63.5910(a) - Table 14 - semi-annual compliance report
  - b. 63.5910(b) - submittal date of reports in accordance with Table 14
  - c. 63.5910(c) - content of compliance reports
  - d. 63.5910(d)-(f) - submission of deviation reports



e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(1) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.75 pounds of VOC per hour, excluding emission from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as calculated in f)(1)b., by the number of actual number of hours that the emissions unit was in operation, as recorded in d)(2)f.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

90.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. and d)(2)c.

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) = VOC emissions from the resin mix operations, in pounds per day.

W<sub>i</sub> = the weight of resin mix ( i ) produced, as specified in d)(2)b., in pounds per day.

OC<sub>i</sub> = the VOC content of mix ( i ), as specified in d)(2)c., 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 pound per pound of available VOC content.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

c. Emission Limitation:

16.43 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and adding the daily VOC emissions from all resins, as recorded each day in d)(2)d and calculated per f)(1)b, from this resin mixing unit, for the calendar year, and this total (pounds per year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility wide.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$$EC(OC) = \text{summation of } (V_i \times OC_i) \text{ daily over a month}$$

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c, in gallons per month.

$OC_i$  = the OC content of cleanup material  $i$ , as specified in d)(3)d, in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility wide.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as



recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (in pounds per year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

2.58 pounds of PE per hour.

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

CONCsolid = maximum solids concentration in the mix, which is 625.0 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 99.0%, or 0.99, as specified in the permit application.

If required, the permittee shall demonstrate compliance using Method 1-5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

Visible emissions shall not exceed 20% opacity of visible PE, as a 6-minute average.

Applicable Compliance Method:

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

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

PE shall be less than 10 tons per year.

Applicable Compliance Method:



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

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**Facility ID:** 0448011664

**Effective Date:** To be entered upon final issuance

The permittee may demonstrate compliance with the annual allowable PE limitation above by multiplying the maximum hourly controlled PE rate [(6.25 pounds/hour) $\times$ (1-0.99)=0.06 pounds/hour] by the maximum annual number of hours of operation (8760 hours/year), and then dividing by 2000 pounds/ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)(ii))

g) Miscellaneous Requirements

- (1) None.



**4. P002, Pultrusion Stream A**

**Operations, Property and/or Equipment Description:**

Stream A

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) d)(8) through d)(10)
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P002 - Pultrusion Line A equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 2.5 pounds per hour and 7.3 tons per year. See b)(2)a.</p> <p>Organic Compound (OC) emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.</p>
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	<p>40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)</p> <p>[In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]</p>	<p>Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]</p> <p>Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.</p> <p>See c)(3)</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)	Visible emissions (VE) shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.07 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	OAC rule 3745-114	See d)(8) through d)(10)

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d, and f)(1)b shall be void.

- b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled particulate emissions from this air contaminant source since the potential to emit for particulate emissions is less than ten tons per year.
- c. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.
- c) Operational Restrictions
- (1) The permittee shall operate the particulate control, fabric filter system whenever this emissions unit is in operation.  
  
(Authority for term: OAC rule 3745-77-07(A)(1))
  - (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (eg. acetone) for cleanup of this emission unit.  
  
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
  - (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.  
  
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
  - (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:
    - a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.
    - b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement
    - c. 63.5808(b) - Table 4 - work practice standards  
(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
    - a. the color of the emissions;
    - b. whether the emissions are representative of normal operations;
    - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
    - d. the total duration of any visible emission incident; and
    - e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed (e.g. styrene), in percent by weight;
  - d. the total VOC emissions rate for resin employed (e.g. styrene), calculated as required in f)(1)b., in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation;
  - f. the average hourly VOC emission rate for resin employed (e.g. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1)d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (5) The permittee shall maintain records of the facility's potential to emit for each individual hazardous air pollutant (HAP) emission and the total of all HAP emissions combined by maintaining a formal up-to-date HAP emissions inventory from all HAP emission's units a the facility. The permittee shall maintain a record including methods, procedures, and assumptions supporting the calculations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (6) Retain a copy of all records on-site, including calculations and supporting information for at least 5 years.

(Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (8) The PTI application for this/these emissions unit(s), P002, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>@</sup>, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been



documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; or
- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e.,  $\Delta$ 24 $\Delta$  hours per day and  $\Delta$ 7 $\Delta$  days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or  $\Delta$ worst case $\Delta$  toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P002, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the  $\Delta$ Toxic Air Contaminant Statute $\Delta$ , ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (9) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration $\Delta$ , the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:



- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the AToxic Air Contaminant Statute@ will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (10) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F):
  - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the AToxic Air Contaminant Statute@, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70



e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation reports which include the following information:
  - a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 2.5 pounds per hour, and the actual average hourly VOC emissions for each such day;
  - b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
  - c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
  - d. an identification of each month during which any HAP, VOC, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
  - e. an identification of each day during which an inspection was not performed by the required frequency;
  - f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
  - g. an identification of each month of a 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.



(Authority for term: OAC rule 3745-77-07(C)(1))

(4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:

- a. 63.5910(a) - Table 14 - semi-annual compliance report
- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(1) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

2.5 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d., by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:



Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:

$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$$EF(OC_i) = 0.04$$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b. shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d. and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:



EC(OC) = summation of (Vi x OCi) daily over a month

where:

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

Vi = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.

OCi = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.07 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.500 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)



If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.



**5. P003, Pultrusion Stream B**

**Operations, Property and/or Equipment Description:**

Stream B

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) d)(8) through d)(10)
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P003 - Pultrusion Line B equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	<p>Volatile Organic Compound (VOC) emissions shall not exceed 2.5 pounds per hour and 7.3 tons per year. See b)(2)a.</p> <p>Organic Compound (OC) emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.</p>
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	<p>40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)</p> <p>[In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]</p>	<p>Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]</p> <p>Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.</p> <p>See c)(3)</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)	Visible emissions (VE) shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.07 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	OAC rule 3745-114	See d)(8) through d)(10)

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d., and f)(1)b. shall be void.

- b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled particulate emissions from this air contaminant source since the potential to emit for particulate emissions is less than ten tons per year.
- c. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emissions unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (eg. acetone) for cleanup of this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.

- b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement

- c. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;

- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed (e.g. styrene), in percent by weight;
  - d. the total VOC emissions rate for resin employed (e.g. styrene), calculated as required in f)(1)b., in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation;
  - f. the average hourly VOC emission rate for resin employed (e.g. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1)d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (5) The permittee shall maintain records of the facility's potential to emit for each individual hazardous air pollutant (HAP) emission and the total of all HAP emissions combined by maintaining a formal up-to-date HAP emissions inventory from all HAP emission's units a the facility. The permittee shall maintain a record including methods, procedures, and assumptions supporting the calculations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (6) Retain a copy of all records on-site, including calculations and supporting information for at least 5 years.

(Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (8) The PTI application for this/these emissions unit(s), P003, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>@</sup>, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been



documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; or
- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH)  $\Delta$ Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices $\Delta$ ; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e.,  $\Delta$ 24 $\Delta$  hours per day and  $\Delta$ 7 $\Delta$  days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or  $\Delta$ worst case $\Delta$  toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P003, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the  $\Delta$ Toxic Air Contaminant Statute $\Delta$ , ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (9) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration $\Delta$ , the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:



- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the AToxic Air Contaminant Statute will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the AToxic Air Contaminant Statute, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (10) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic Air Contaminant Statute, ORC 3704.03(F):
  - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the AToxic Air Contaminant Statute, ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the AToxic Air Contaminant Statute, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the AToxic Air Contaminant Statute, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
  - e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70



e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation reports which include the following information:
  - a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 2.5 pounds per hour, and the actual average hourly VOC emissions for each such day;
  - b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
  - c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
  - d. an identification of each month during which any HAP, VOC, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
  - e. an identification of each day during which an inspection was not performed by the required frequency;
  - f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
  - g. an identification of each month of a 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.



(Authority for term: OAC rule 3745-77-07(C)(1))

(4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:

- a. 63.5910(a) - Table 14 - semi-annual compliance report
- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(1) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

2.5 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d., by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:



Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:

$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$$EF(OC_i) = 0.04$$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b. shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d. and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:



EC(OC) = summation of (Vi x OCi) daily over a month

where:

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

Vi = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.

OCi = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.07 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.500 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)



If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.



**6. P004, Pultrusion Stream C**

**Operations, Property and/or Equipment Description:**

Stream C

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) d)(6) through d)(8)
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P004 - Pultrusion Line C equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions shall not exceed 4.9 pounds per hour and 7.3 tons per year. See b)(2)a.  Organic Compound (OC) emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]  Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(4)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)e.
e.	OAC rule 3745-17-07(A)	Visible emissions (VE) shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.07 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	ORC 3704-03(F)	See d)(6) through d)(8)

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).
- b. Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.
- c. The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d, and f)(1)b shall be void.
- d. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled particulate emissions from this air contaminant source since the potential to emit for particulate emissions is less than ten tons per year.
- e. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- f. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emissions unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (eg. acetone) for cleanup of this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.

- b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement

- c. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;

- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed (e.g. styrene), in percent by weight;
  - d. the total VOC emissions rate for resin employed (e.g. styrene), calculated as required in f)(1)b., in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation;
  - f. the average hourly VOC emission rate for resin employed (e.g. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1).d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (5) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (6) The PTI application for this/these emissions unit(s), P004, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>®</sup>, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.



- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A24@ hours per day and A7@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P004, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

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

- a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 4.9 pounds per hour, and the actual average hourly VOC emissions for each such day;



- b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
- c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
- d. an identification of each month during which any HAP, VOC, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
- g. an identification of each 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
- h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:

- a. 63.5910(a) - Table 14 - semi-annual compliance report



- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(1) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

4.9 pounds of VOC per hour, excluding emissions from cleanup material.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d, by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:



$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$EF(OC_i) = 0.04$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$EC(OC) = \text{summation of } (V_i \times OC_i) \text{ daily over a month}$

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.



OC<sub>i</sub> = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.07 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.500 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)

If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.



**7. P005, Pultrusion Stream D**

**Operations, Property and/or Equipment Description:**

Stream D

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) d)(6) through d)(8)
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P005 - Pultrusion Line D equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions shall not exceed 3.6 pounds per hour and 7.3 tons per year. See b)(2)a.  OC emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]  Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(4)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)	Visible Emissions (VE) from this emission unit shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.30 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	OAC rule 3745-114	See d)(6) through d)(8)

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d., and f)(1)b. shall be void.

- b. The Best Available Technology (BAT) requirement under OAC rule 3745-31-05(A)(3) does not apply to uncontrolled particulate emissions from this air contaminant source since the potential to emit from particulate emissions is less than ten tons per year.
- c. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emission unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (eg. acetone) for cleanup of this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.

- b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement

- c. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;

- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed, in percent by weight;
  - d. the total VOC emissions rate for resin employed (e.g. styrene), calculated as required in f)(1)b., in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation; and
  - f. the average hourly VOC emission rate for resin employed (e.g. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1)d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (5) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (6) The PTI application for this/these emissions unit(s), P005, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled Review of New Sources of Air Toxic Emissions, Option A, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.



- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A24@ hours per day and A7@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P005, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F):
  - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
  - e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation reports which include the following information:
  - a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 3.6 pounds per hour, and the actual average hourly VOC emissions for each such day;



- b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
- c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
- d. an identification of each month during which any HAP containing, VOC containing, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
- g. an identification of each 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
- h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:
  - a. 63.5910(a) - Table 14 - semi-annual compliance report



- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(1) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.6 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d., by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:



$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$EF(OC_i) = 0.04$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b. shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d. and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$EC(OC) = \text{summation of } (V_i \times OC_i) \text{ daily over a month}$

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.



OC<sub>i</sub> = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.30 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.667 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)

If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.



**8. P006, Pultrusion Stream E**

**Operations, Property and/or Equipment Description:**

Stream E

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) d)(6) through d)(8)
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P006 - Pultrusion Line E equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions shall not exceed 3.6 pounds per hour and 7.3 tons per year. See b)(2)a.  OC emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]  Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(4)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)	Visible Emissions (VE) from this emission unit shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.30 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	OAC rule 3745-114	See d)(6) through d)(8)

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d, and f)(1)b shall be void.

- b. The Best Available Technology (BAT) requirement under OAC rule 3745-31-05(A)(3) does not apply to uncontrolled particulate emissions from this air contaminant source since the potential to emit from particulate emissions is less than ten tons per year.
- c. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emission unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (eg. acetone) for cleanup of this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.

- b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement

- c. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;

- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed, in percent by weight;
  - d. the total VOC emissions rate for resin employed (eg. styrene), calculated as required in f)(1)b., in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation; and
  - f. the average hourly VOC emission rate for resin employed (eg. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1)d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (5) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (6) The PTI application for this/these emissions unit(s), P006, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>®</sup>, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.



- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A24@ hours per day and A7@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P006, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

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

- a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 3.6 pounds per hour, and the actual average hourly VOC emissions for each such day;



- b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
- c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
- d. an identification of each month during which any HAP containing, VOC containing, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
- g. an identification of each 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
- h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:
  - a. 63.5910(a) - Table 14 - semi-annual compliance report



- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(2) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.6 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d., by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:



$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$EF(OC_i) = 0.04$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$EC(OC) = \text{summation of } (V_i \times OC_i) \text{ daily over a month}$

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.



OC<sub>i</sub> = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.30 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.667 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)

If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.



9. **P007, Mixer 2**

**Operations, Property and/or Equipment Description:**

Not yet installed, initial and startup date, installation date set at PTI issuance date

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

(1) d)(5) through d)(7)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
<b>P007 - Resin Blending Mixer 2</b>		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01457, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions, excluding emissions from non-VOC, non-photochemically reactive clean-up materials, shall not exceed 3.75 pounds per hour, 90.00 pounds per day, and 16.43 tons per year. See b)(2)a.  OC emissions from clean-up materials from all mixing and pultrusion lines at the facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(A)(3)(ii) (PTI 04-01454, issued 12/5/2006)	Particulate Emissions (PE) shall be less than 10.0 tons per year. See b)(2)b.
c.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
d.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a mixing operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(3).
e.	40 CFR Part 63, Subpart A	See b)(2)c.
f.	OAC rule 3745-17-07(A)	Visible Emissions (VE) from this emission



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		unit shall not exceed 20% opacity as a 6-minute average.
g.	OAC rule 3745-17-11(B)	PE shall not exceed 2.58 pounds per hour.
h.	OAC rule 3745-114	See d)(5) through d)(7)

(2) Additional Terms and Conditions

- a. The VOC emissions from the mixing operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).
- b. Permit to Install 04-01457 for this air contaminant source takes into account the use of a fabric filter system, whenever this air contaminant source is in operation, with a minimum control efficiency of 99%, by weight for PE, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).
- c. Table 15 to 40 CFR Part 63 Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.
- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emissions unit is in operation.  
(Authority for term: OAC rule 3745-77-07(A)(1))
- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (eg. acetone) for cleanup of this emission unit.  
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
- (3) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:
  - a. 63.5808(b) - Table 4 - work practice standards  
(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:



- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emission unit:

- a. the company identification of each resin employed;
- b. the weight of each resin employed in pounds;
- c. the VOC content of each resin employed (e.g. styrene), in percent by weight;
- d. the individual HAP and total HAP content of each resin employed, in pounds per gallon;
- e. the total VOC emission rate for all resin employed (e.g. styrene), calculated as required in f)(1)b., in pounds per day;
- f. the actual number of hours that the emissions unit was in operation;
- g. the average, hourly VOC emission rate for all resins employed (e.g. styrene), calculated by e./f., in average, pounds per hour; and
- h. the daily and hourly (average) VOC emissions rate are to be calculated by no later than the first week of the following month from which information was collected for this emission unit.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for the month (total plantwide), except for cleanup on coating lines:



- a. the company identification for each cleanup material employed;
- b. an identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
- c. the volume of each cleanup material applied in gallons;
- d. the OC content of each cleanup material applied in pounds per gallon;
- e. the total OC emissions rate for all cleanup material, in pounds per month, calculated as required in f)(1)d.;
- f. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month (all used is assumed to evaporate);
- g. the monthly OC emission rate is calculated by no later than the first week of the following month from which the information was collected for this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:
  - a. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (5) The PTI application for this/these emissions unit(s), P007, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>@</sup>, as follows:
  - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>@</sup>; or



- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or worst case toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P007, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the Toxic Air Contaminant Statute, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (6) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and



- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>@</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

- e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

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



- a. the identification of each day during which the VOC emissions, excluding cleanup materials, from this emission unit exceeded 3.75 pounds per hour or 16.43 tons per year, and the actual VOC emissions for each such time period;
- b. the identification of each day during which the VOC emissions, excluding cleanup materials, from this emission unit exceeded 90.00 pounds per day, and the actual VOC emissions for each such day;
- c. an identification of each month during which the combined OC emissions, from cleanup materials from all emission units located at this facility other than the coating lines, exceeded 2.18 tons per month facility wide, and the actual OC emissions for each such month;
- d. an identification of each month during which a HAP, a VOC, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented; and
- g. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:

- a. 63.5910(a) - Table 14 - semi-annual compliance report
- b. 63.5910(b) - submittal date of reports in accordance with Table 14



- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(1) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.75 pounds of VOC per hour, excluding emission from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as calculated in f)(1)b., by the number of actual number of hours that the emissions unit was in operation, as recorded in d)(2)f.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

90.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. and d)(2)c.

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) = VOC emissions from the resin mix operations, in pounds per day.

W<sub>i</sub> = the weight of resin mix ( i ) produced, as specified in d)(2)b., in pounds per day.



$OC_i$  = the VOC content of mix ( i ), as specified in d)(2)c, 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 pound per pound of available VOC content.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

c. Emission Limitation:

16.43 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and adding the daily VOC emissions from all resins, as recorded each day in d)(2)d. and calculated per f)(1)b., from this resin mixing unit, for the calendar year, and this total (pounds per year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility wide.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$EC(OC)$  = summation of  $(V_i \times OC_i)$  daily over a month

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.

$OC_i$  = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility wide.

Applicable Compliance Method:



Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (in pounds per year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

2.58 pounds of PE per hour.

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

CONCsolid = maximum solids concentration in the mix, which is 625.0 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 99.0%, or 0.99, as specified in the permit application.

If required, the permittee shall demonstrate compliance using Method 1-5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

Visible emissions shall not exceed 20% opacity of visible PE, as a 6-minute average.

Applicable Compliance Method:

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

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

PE shall be less than 10 tons per year.

Applicable Compliance Method:



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088457

**Facility ID:** 0448011664

**Effective Date:** To be entered upon final issuance

The permittee may demonstrate compliance with the annual allowable PE limitation above by multiplying the maximum hourly controlled PE rate [(6.25 pounds/hour) $\times$ (1-0.99)=0.06 pounds/hour] by the maximum annual number of hours of operation (8760 hours/year), and then dividing by 2000 pounds/ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3)(ii))

g) Miscellaneous Requirements

- (1) None.



10. **P008, Pultrusion Stream F**

**Operations, Property and/or Equipment Description:**

Not yet installed, initial and startup date, installation date set at PTI issuance date

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

(1) d)(6) through d)(8)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P008 - Pultrusion Line F equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions shall not exceed 3.6 pounds per hour and 7.3 tons per year. See b)(2)a.  OC emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]  Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(4)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)	Visible Emissions (VE) from this emission unit shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.30 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	OAC rule 3745-114	See d)(6) through d)(8).

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d, and f)(1)b shall be void.

- b. The Best Available Technology (BAT) requirement under OAC rule 3745-31-05(A)(3) does not apply to uncontrolled particulate emissions from this air contaminant source since the potential to emit from particulate emissions is less than ten tons per year.
- c. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emission unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (e.g. acetone) for cleanup of this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.

- b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement

- c. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;

- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed, in percent by weight;
  - d. the total VOC emissions rate for resin employed (e.g. styrene), calculated as required in f)(1)b., in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation; and
  - f. the average hourly VOC emission rate for resin employed (e.g. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1)d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (5) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (6) The PTI application for this/these emissions unit(s), P008, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>®</sup>, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.



- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A24@ hours per day and A7@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P008, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

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

- a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 3.6 pounds per hour, and the actual average hourly VOC emissions for each such day;



- b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
- c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
- d. an identification of each month during which any HAP containing, VOC containing, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
- g. an identification of each 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
- h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:

- a. 63.5910(a) - Table 14 - semi-annual compliance report



- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(3) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.6 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d., by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:



$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$EF(OC_i) = 0.04$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d. and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$EC(OC) = \text{summation of } (V_i \times OC_i) \text{ daily over a month}$

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.



OC<sub>i</sub> = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.30 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.667 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)

If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.



11. **P009, Pultrusion Stream G**

**Operations, Property and/or Equipment Description:**

Not yet installed, initial and startup date, installation date set at PTI issuance date

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

(1) d)(6) through d)(8)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P009 - Pultrusion Line G equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions shall not exceed 3.6 pounds per hour and 7.3 tons per year. See b)(2)a.  OC emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]  Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(4)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)	Visible Emissions (VE) from this emission unit shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.30 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	OAC rule 3745-114	See d)(6) through d)(8).

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d, and f)(1)b shall be void.

- b. The Best Available Technology (BAT) requirement under OAC rule 3745-31-05(A)(3) does not apply to uncontrolled particulate emissions from this air contaminant source since the potential to emit from particulate emissions is less than ten tons per year.
- c. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emission unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (e.g. acetone) for cleanup of this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.

- b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement

- c. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;

- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed, in percent by weight;
  - d. the total VOC emissions rate for resin employed (e.g. styrene), calculated as required in f)(1)b., in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation; and
  - f. the average hourly VOC emission rate for resin employed (e.g. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1)d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (5) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (6) The PTI application for this/these emissions unit(s), P009, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>®</sup>, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.



- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A24@ hours per day and A7@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P009, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

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

- a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 3.6 pounds per hour, and the actual average hourly VOC emissions for each such day;



- b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
- c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
- d. an identification of each month during which any HAP containing, VOC containing, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
- g. an identification of each 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
- h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:

- a. 63.5910(a) - Table 14 - semi-annual compliance report



- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(4) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.6 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d., by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:



$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$EF(OC_i) = 0.04$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b. shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d. and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$EC(OC) = \text{summation of } (V_i \times OC_i) \text{ daily over a month}$

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.



OC<sub>i</sub> = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.30 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.667 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)

If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.



12. **P010, Pultrusion Stream H**

**Operations, Property and/or Equipment Description:**

Not yet installed, initial and startup date, installation date set at PTI issuance date

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

(1) d)(6) through d)(8)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P010 - Pultrusion Line H equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions shall not exceed 3.6 pounds per hour and 7.3 tons per year. See b)(2)a.  OC emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]  Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(4)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)	Visible Emissions (VE) from this emission unit shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.30 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	OAC rule 3745-114	See d)(6) through d)(8).

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d, and f)(1)b shall be void.

- b. The Best Available Technology (BAT) requirement under OAC rule 3745-31-05(A)(3) does not apply to uncontrolled particulate emissions from this air contaminant source since the potential to emit from particulate emissions is less than ten tons per year.
- c. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emission unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (e.g. acetone) for cleanup of this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.

- b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement

- c. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;

- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed, in percent by weight;
  - d. the total VOC emissions rate for resin employed (eg. styrene), calculated as required in f)(1)b., in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation; and
  - f. the average hourly VOC emission rate for resin employed (e.g. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1)d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (5) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (6) The PTI application for this/these emissions unit(s), P010, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>®</sup>, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.



- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A24@ hours per day and A7@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P010, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

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

- a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 3.6 pounds per hour, and the actual average hourly VOC emissions for each such day;



- b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
- c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
- d. an identification of each month during which any HAP containing, VOC containing, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
- g. an identification of each 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
- h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:

- a. 63.5910(a) - Table 14 - semi-annual compliance report



- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(5) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.6 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d., by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:



$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$EF(OC_i) = 0.04$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d. and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$EC(OC) = \text{summation of } (V_i \times OC_i) \text{ daily over a month}$

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.



OC<sub>i</sub> = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.30 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.667 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)

If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.



13. **P011, Pultrusion Stream I**

**Operations, Property and/or Equipment Description:**

Not yet installed, initial and startup date, installation date set at PTI issuance date

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

(1) d)(6) through d)(8)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P011 - Pultrusion Line I equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions shall not exceed 3.6 pounds per hour and 7.3 tons per year. See b)(2)a.  OC emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]  Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(4)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)	Visible Emissions (VE) from this emission unit shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.30 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	ORC 3704-03(F)	See d)(6) through d)(8).

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d, and f)(1)b shall be void.

- b. The Best Available Technology (BAT) requirement under OAC rule 3745-31-05(A)(3) does not apply to uncontrolled particulate emissions from this air contaminant source since the potential to emit from particulate emissions is less than ten tons per year.
- c. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emission unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (eg. acetone) for cleanup of this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.

- b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement

- c. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;

- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed, in percent by weight;
  - d. the total VOC emissions rate for resin employed (e.g. styrene), calculated as required in f)(1)b., in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation; and
  - f. the average hourly VOC emission rate for resin employed (e.g. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1)d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (5) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (6) The PTI application for this/these emissions unit(s), P011, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>®</sup>, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.



- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A24@ hours per day and A7@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P011, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

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

- a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 3.6 pounds per hour, and the actual average hourly VOC emissions for each such day;



- b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
- c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
- d. an identification of each month during which any HAP containing, VOC containing, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
- g. an identification of each 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
- h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:
  - a. 63.5910(a) - Table 14 - semi-annual compliance report



- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(6) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.6 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d., by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:



$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$EF(OC_i) = 0.04$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b. shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d. and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$EC(OC) = \text{summation of } (V_i \times OC_i) \text{ daily over a month}$

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c, in gallons per month.



OC<sub>i</sub> = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.30 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.667 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)

If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.



14. **P012, Pultrusion Stream J**

**Operations, Property and/or Equipment Description:**

Not yet installed, initial and startup date, installation date set at PTI issuance date

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

(1) d)(6) through d)(8)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P012 - Pultrusion Line J equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions shall not exceed 3.6 pounds per hour and 7.3 tons per year. See b)(2)a.  OC emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]  Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(4)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)	Visible Emissions (VE) from this emission unit shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.30 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	OAC rule 3745-114	See d)(6) through d)(8).

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d, and f)(1)b shall be void.

- b. The Best Available Technology (BAT) requirement under OAC rule 3745-31-05(A)(3) does not apply to uncontrolled particulate emissions from this air contaminant source since the potential to emit from particulate emissions is less than ten tons per year.
- c. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emission unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (eg. acetone) for cleanup of this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.

- b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement

- c. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;

- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed, in percent by weight;
  - d. the total VOC emissions rate for resin employed (eg. styrene), calculated as required in f)(1)b, in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation; and
  - f. the average hourly VOC emission rate for resin employed (eg. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1)d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (5) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (6) The PTI application for this/these emissions unit(s), P012, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>®</sup>, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.



- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A24@ hours per day and A7@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P012, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

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

- a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 3.6 pounds per hour, and the actual average hourly VOC emissions for each such day;



- b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
- c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
- d. an identification of each month during which any HAP containing, VOC containing, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
- g. an identification of each 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
- h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:

- a. 63.5910(a) - Table 14 - semi-annual compliance report



- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(7) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.6 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d., by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:



$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$EF(OC_i) = 0.04$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b. shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d. and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$EC(OC) = \text{summation of } (V_i \times OC_i) \text{ daily over a month}$

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.



OC<sub>i</sub> = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.30 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.667 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)

If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.



15. **P013, Pultrusion Stream K**

**Operations, Property and/or Equipment Description:**

Not yet installed, initial and startup date, installation date set at PTI issuance date

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

(1) d)(6) through d)(8)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P013 - Pultrusion Line K equipped with a cut-off saw and a common baghouse.		
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01454, issued 12/5/2006)	Volatile Organic Compound (VOC) emissions shall not exceed 3.6 pounds per hour and 7.3 tons per year. See b)(2)a.  OC emissions from clean-up materials from all mixing and pultrusion lines at this facility shall not exceed 2.18 tons per month and 26.14 tons per year. See b)(2)d.
b.	OAC rule 3745-31-05(D) (PTI 04-01454, issued 12/5/2006)	See 2. through 4. of Section B.
c.	40 CFR Part 63, Subpart WWWW (40 CFR 63.5780-63.5935)  [In accordance with 40 CFR 63.5805(b), this emissions unit is a pultrusion operation at an existing area source that became a major source after the date of publication of this subpart subject to the emissions limitations/control measures specified in this section.]	Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging. [40 CFR 63.5805 and Table 3]  Work practice standards must be followed in accordance with the applicable portions of 40 CFR 63.5805 and Table 4.  See c)(4)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	40 CFR Part 63, Subpart A	See b)(2)c.
e.	OAC rule 3745-17-07(A)	Visible Emissions (VE) from this emission unit shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 1.30 pounds per hour.
g.	OAC rule 3745-21-07(G)(2)	Photochemically reactive OC emissions shall not exceed 40 pounds per day. See b)(2)a.
h.	OAC rule 3745-31-05(A)(3)(b) (PTI 04-01457, issued 12/5/2006)	See b)(2)b.
i.	OAC rule 3745-114	See d)(6) through d)(8).

(2) Additional Terms and Conditions

- a. The VOC emissions from the resin bath operation consist of styrene, a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

Each day that a photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] is employed, the organic compound (OC) emissions from all coatings and photochemically reactive cleanup materials shall not exceed 40 pounds per day. OC emissions from cleanup material that is not a photochemically reactive material shall not be included in showing compliance with these emission limitations.

The OC emission limitations of 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(3), e)(1)d, and f)(1)b shall be void.

- b. The Best Available Technology (BAT) requirement under OAC rule 3745-31-05(A)(3) does not apply to uncontrolled particulate emissions from this air contaminant source since the potential to emit from particulate emissions is less than ten tons per year.
- c. Table 15 to 40 CFR Part 63, Subpart WWWW shows which sections of the General Provisions in 40 CFR Part 63, Subpart A apply to this emission unit.



- d. The clean-up materials from all mixing and pultrusion lines shall include the following emission units: P001, P002, P003, P004, P005, P006, P007, P008, P009, P010, P011, P012, and P013.

c) Operational Restrictions

- (1) The permittee shall operate the particulate control, fabric filter system whenever this emission unit is in operation.

(Authority for term: OAC rule 3745-77-07(A)(1))

- (2) The permittee shall use only non-HAP, non-VOC, non-photochemically reactive material (eg. acetone) for cleanup of this emission unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition and removal of materials.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5808(b) - Table 3, No. 9 - reduce total organic HAP emissions by at least 60 weight percent.

- b. 63.5830 - (a), (b), (c), (d), or (e) - standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reduction requirement

- c. 63.5808(b) - Table 4 - work practice standards

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;

- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

- d. the total duration of any visible emission incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.



If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (2) The permittee shall collect and record the following information for each day for this emissions unit:
- a. the company identification for each resin employed;
  - b. the weight of resin employed, in pounds and identify how much of each resin was subject to preform injection, enclosed bath pultrusion, or open bath pultrusion (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
  - c. the VOC content of resin employed, in percent by weight;
  - d. the total VOC emissions rate for resin employed (eg. styrene), calculated as required in f)(1)b., in pounds per day;
  - e. the actual number of hours that the emissions unit was in operation; and
  - f. the average hourly VOC emission rate for resin employed (e.g. styrene), calculated by d./e., in average, pounds per hour.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) The permittee shall collect and record the following information for each month (total plantwide, except for cleanup on coating lines):
- a. the company identification for each cleanup material employed;
  - b. the identification of whether or not each cleanup material employed is photochemically reactive, a VOC, or contains HAP;
  - c. the volume of each cleanup material applied in gallons;
  - d. the OC content of each cleanup material applied in pounds per gallon;
  - e. the combined total emission rate from all emission units for all cleanup material, except the coating lines, at this facility, in pounds per month as calculated in f)(1)d. (all used assumed to evaporate).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))



- (4) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emission unit was in operation.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (5) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections by December 5, 2009:

- a. 63.5895(c) - resin and gel coat use records
- b. 63.5895(e) - wet area enclosures records
- c. 63.5900(a) - organic HAP content limits compliance
- d. 63.5900(b) - deviation reporting
- e. 63.5900(c) - compliance with Table 4 work practice standards
- f. 63.5915(a), (c), (d) - required overall records that should be maintained

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

- (6) The PTI application for this/these emissions unit(s), P013, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled AReview of New Sources of Air Toxic Emissions, Option A<sup>®</sup>, as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices<sup>®</sup>; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.



- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., A24@ hours per day and A7@ days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: Styrene

TLV (mg/m3): 85

Maximum Hourly Emission Rate (lbs/hr): 8.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 221.4

MAGLC (ug/m3): 2028.6

The permittee, has demonstrated that emissions of Styrene, from emissions unit(s) P013, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the AToxic Air Contaminant Statute@, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).



If the permittee determines that the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup> will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the  $\Delta$ Toxic Air Contaminant Statute<sup>®</sup>, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- e. [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

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

- a. an identification of each day during which the average hourly VOC emissions, excluding cleanup materials, from this emission unit exceeded 3.6 pounds per hour, and the actual average hourly VOC emissions for each such day;



- b. an identification of each day during which the VOC emissions, excluding cleanup materials, from this emissions unit exceeded 40.0 pounds per day or 7.3 tons per year, and the actual VOC emissions for each such time period;
- c. an identification of each month during which the combined OC emissions from cleanup materials, exceeded 2.18 tons per month from all mixing and pultrusion lines at the facility, and the actual OC emissions for each such month;
- d. an identification of each month during which any HAP containing, VOC containing, or photochemically reactive cleanup materials were employed, and the actual OC and individual HAP emissions for each such month;
- e. an identification of each day during which an inspection was not performed by the required frequency;
- f. an identification of each instance when an equipment standard(s) or work practice(s) was not implemented;
- g. an identification of each 12-month rolling period in which the total organic HAP emissions were not reduced at least 60 percent by weight for the combined emissions of all pultrusion units, facility-wide. The actual emissions reported and the percent reduction calculated for each such period (subject to initial compliance dates as specified in table 2 and 13 of 40 CFR Part 63, Subpart WWWW);
- h. if no deviations, report no deviations.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that the particulate control filter was not in service when the emission unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (3) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (Toledo Division of Environmental Services) by January 31 and July 31 of each year and shall cover the previous 6-month period.

(Authority for term: OAC rule 3745-77-07(C)(1))

- (4) The permittee shall submit semiannual reports and such other notifications and reports to the appropriate Ohio EPA District office or local air agency as are required pursuant to 40 CFR Part 63, Subpart WWWW, per the following sections with the first report due by January 31, 2010:

- a. 63.5910(a) - Table 14 - semi-annual compliance report



- b. 63.5910(b) - submittal date of reports in accordance with Table 14
- c. 63.5910(c) - content of compliance reports
- d. 63.5910(d)-(f) - submission of deviation reports
- e. 63.5910(g) - Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

f) Testing Requirements

(8) Compliance with the allowable emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.6 pounds of VOC per hour, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined by dividing the daily VOC emissions, as recorded in d)(2)d., by the number of actual hours that the emission unit was in operation, as recorded in d)(2)e.

If required, the permittee shall demonstrate compliance with this emission limitation through testing performed in accordance with Methods 1 through 4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A. Use of Method 18, 25 or 25A is to be selected based on the results of pre-survey stack sampling and U.S. EPA guidance documents.

The permittee shall also determine the capture efficiency using Methods 204A through 204F, as appropriate, of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emission Limitation:

40.0 pounds of VOC per day, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be determined in accordance with the record keeping requirements specified in d)(2)b. & c. Compliance shall be determined based upon the following equation:

where:

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

where:



$E(OC)$  = VOC emissions as from all resin operations (e.g., styrene), in pounds per day.

$W_i$  = the weight of resin  $i$  employed, as specified in d)(2)b., in pounds per day.

$OC_i$  = the VOC content of resin  $i$ , as specified in d)(2)c., in percent by weight.

$EF(OC_i) = 0.04$

For VOC emissions (styrene), which is 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88))

Note: Formulation data or Method 24 of 40 CFR Part 60, Appendix A shall be used to determine the organic compound contents of the resin.

[Note: After the revision to OAC rule 3745-21-07(G) is approved into the Ohio SIP, f)(1)b. shall be voided.]

(Authority for term: OAC rule 3745-77-07(C)(1))

c. Emission Limitation:

7.3 tons of VOC per year, excluding emissions from cleanup materials.

Applicable Compliance Method:

Compliance shall be based on maintaining the daily records as required in d)(2), and summing the daily VOC emissions from all resins, as recorded each day in d)(2)d. and calculated per f)(1)b., from this pultrusion unit, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

2.18 tons of OC per month, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3). Determination of OC emissions for all cleanup materials shall be determined based upon the following equation:

$EC(OC) = \text{summation of } (V_i \times OC_i) \text{ daily over a month}$

where:

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

$V_i$  = the volume of cleanup material applied, as specified in d)(3)c., in gallons per month.



OC<sub>i</sub> = the OC content of cleanup material i, as specified in d)(3)d., in pounds per gallon.

The summation of all the cleanup materials from all emission units on a monthly basis.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Emission Limitation:

26.14 tons of OC per year, from cleanup materials facility-wide from all mixing and pultrusion equipment.

Applicable Compliance Method:

Compliance shall be based on maintaining the monthly records as required in d)(3), and by summing the monthly OC emissions from all cleanup materials, as recorded each month in d)(3)e., from all emission units, for the calendar year, and this total (lbs/year) shall be divided by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitation:

1.30 pounds of PE per hour.

Applicable Compliance Method:

Compliance is based on the following equation:

$$PE(SAW) = V(SC) \times CUT(MIN) \times DENSITY \times (1 - CE) \times 60 \text{ MIN/HR}$$

where:

PE(SAW) = particulate emission on cut-off saw on pultrusion line (lbs/hr)

V(SC) = volume of material removed by saw cut (cross sectional area x width of blade), blade width (0.1875 in), cross sectional area (0.0625 ft<sup>2</sup>) totaling (0.001 ft<sup>3</sup>)

CUT(MIN)= 0.667 cuts/minute

DENSITY= 12 lb/ft<sup>3</sup>

CE= control efficiency (99%)

If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-17-03(B)(10) and OAC rule 3745-77-07(C)(1))

g. Emission Limitation:

VE shall not exceed 20% 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).

(Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1))

h. Emission Limitation:

Reduce total organic HAP emissions by at least 60 weight percent either on an individual basis or by averaging.

Applicable Compliance Method:

The permittee shall demonstrate compliance through one of the options as required pursuant to 40 CFR 63, Subpart WWWW, per the following sections: 63.5830 and 63.5850. Compliance shall be demonstrated in accordance with the option(s) the permittee has selected by December 5, 2010.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart WWWW)

g) Miscellaneous Requirements

- (1) None.