

Facility ID: 1667020035 Issuance type: Title V Final Permit

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

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

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

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Part II - Specific Facility Terms and Conditions

a State and Federally Enforceable Section

1. In order to limit the potential to emit for the purpose of avoiding additional new source review requirements, annual emissions from all emissions units at this facility, based upon a rolling 365-day summation of emissions, shall not exceed the levels specified in the following table:

Pollutant Emissions (TPY)

organic material 127
volatile organic compounds 81
styrene 43

It is intended, and the applicant has requested, that the above limits and respective monitoring, record keeping, and reporting be federally enforceable.

2. Compliance with the above annual limitations shall be based upon a rolling, 365-day summation of emissions from all emissions units at the facility.
3. The permittee shall maintain daily records indicating the rolling, 365-day annual and daily facility emission calculations for organic materials, VOC's, and styrene.
4. The permittee shall notify the Akron Regional Air Quality Management District (Akron RAQMD) in writing of any daily record showing an exceedance in the facility-wide emission limitations established by this permit for organic materials, VOC's, and styrene. The notification shall include a copy of such record and shall be sent to the Akron RAQMD within 45 days after the exceedance occurs.
5. The following insignificant emissions unit is located at this facility:

P916 - resin mixing stations 1 - 3 (permit to install 16-980).

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21.

6. The permittee's existing pultrusion units and fabrication machines are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR Part 63, Subpart WWWW which includes, but is not limited to, the following:

for each pultrusion operation or fabrication machine:

reduce total HAP emissions by at least 60 weight percent.

The following emissions units are subject to the requirements of Subpart WWWW:

P901, P902, P903, P904, P905, P906, P907, P908, P909, P910, P911, P912, P913, P914, P915, P917, P918, P919, P922, P923, P924, P925, P926, P927, and P928.

7. The permittee shall achieve total, on-going compliance with all applicable requirements of 40 CFR Part 63, Subpart WWWW on or before the mandatory compliance date of April 21, 2006. Also, the permittee shall complete any performance test required in paragraph 63.5860 within the time limits specified in paragraph 63.5840.
8. Given the applicability of 40 CFR Part 63, Subpart WWWW, the permittee must also comply with applicable provisions of 40 CFR Part 63, Subpart A as referenced in Table 15 of 40 CFR Part 63, Subpart WWWW.

Tables 1 through 15 and Appendix A of Subpart WWWW are included in the text of Attachment 1 hereto, and are hereby incorporated into this paragraph as if fully written.
9. 40 CFR Part 63, Subpart WWWW - National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production
Source: 68 FR 19402, Apr. 21, 2003, unless otherwise noted.

What This Subpart Covers

40 CFR 63.5780 What is the purpose of this subpart?

This subpart establishes national emissions standards for hazardous air pollutants (NESHAP) for reinforced plastic composites production. This subpart also establishes requirements to demonstrate initial and continuous compliance with the hazardous air pollutants (HAP) emissions standards.

10. 40 CFR 63.5785 Am I subject to this subpart?
- (a) You are subject to this subpart if you own or operate a reinforced plastic composites production facility that is located at a major source of HAP emissions. Reinforced plastic composites production is limited to operations in which reinforced and/or nonreinforced plastic composites or plastic molding compounds are manufactured using thermoset resins and/or gel coats that contain styrene to produce plastic composites. The resins and gel coats may also contain materials designed to enhance the chemical, physical, and/or thermal properties of the product. Reinforced plastic composites production also includes cleaning, mixing, HAP-containing materials storage, and repair operations associated with the production of plastic composites.
 - (b) You are not subject to this subpart if your facility only repairs reinforced plastic composites. Repair includes the non-routine manufacture of individual components or parts intended to repair a larger item as defined in 40 CFR 63.5935
 - (c) You are not subject to this subpart if your facility is a research and development facility as defined in section 112(c)(7) of the Clean Air Act (CAA).
 - (d) You are not subject to this subpart if your reinforced plastic composites operations use less than 1.2 tons per year (tpy) of thermoset resins and gel coats that contain styrene combined.
11. 40 CFR 63.5787 What if I also manufacture fiberglass boats or boat parts?
- (a) If your source meets the applicability criteria in 40 CFR 63.5785, and is not subject to the Boat Manufacturing NESHAP (40 CFR part 63, subpart VVVV), you are subject to this subpart regardless of the final use of the parts you manufacture.
 - (b) If your source is subject to 40 CFR part 63, subpart VVVV, and all the reinforced plastic composites you manufacture are used in manufacturing your boats, you are not subject to this subpart.
 - (c) If you are subject to 40 CFR part 63, subpart VVVV, and meet the applicability criteria in 40 CFR 63.5785, and produce reinforced plastic composites that are not used in fiberglass boat manufacture at your facility, all operations associated with the manufacture of the reinforced plastic composites parts that are not used in fiberglass boat manufacture at your facility are subject to this subpart, except as noted in paragraph (d) of this section.
 - (d) Facilities potentially subject to both this subpart and 40 CFR part 63, subpart VVVV may elect to have the operations in paragraph (c) of this section covered by 40 CFR part 63, subpart VVVV, in lieu of this subpart, if they can demonstrate that this will not result in any organic HAP emissions increase compared to complying with this subpart.
12. 40 CFR 63.5790 What parts of my plant does this subpart cover?
- (a) This subpart applies to each new or existing affected source at reinforced plastic composites production facilities.
 - (b) The affected source consists of all parts of your facility engaged in the following operations: Open molding, closed molding, centrifugal casting, continuous lamination, continuous casting, polymer casting, pultrusion, sheet molding compound (SMC) manufacturing, bulk molding compound (BMC) manufacturing, mixing, cleaning of equipment used in reinforced plastic composites manufacture, HAP-containing materials storage, and repair operations on parts you also manufacture.
 - (c) The following operations are specifically excluded from any requirements in this subpart: Application of mold sealing and release agents, mold stripping and cleaning, repair of parts that you did not manufacture, including non-routine manufacturing of parts, personal activities that are not part of the manufacturing operations (such as hobby shops on military bases), prepreg materials as defined in 40 CFR 63.5935, non-gel coat surface coatings, repair or production materials that do not contain resin or gel coat, and research and development operations as defined in section 112(c)(7) of the CAA.
 - (d) Production resins that must meet military specifications are allowed to meet the organic HAP limit contained in that specification. In order for this exemption to be used, you must supply to the permitting authority the specifications certified as accurate by the military procurement officer, and those specifications must state a requirement for a specific resin, or a specific resin HAP content. Production resins for which this exemption is used must be applied with nonatomizing resin application equipment unless you can demonstrate this is infeasible. You must keep a record of the resins for which you are using this exemption.
13. 40 CFR 63.5795 How do I know if my reinforced plastic composites production facility is a new affected source or an existing affected source?
- (a) A reinforced plastic composites production facility is a new affected source if it meets all the criteria in paragraphs (a)(1) and (2) of this section.
 - (1) You commence construction of the affected source after August 2, 2001.

- (2) You commence construction, and no other reinforced plastic composites production affected source exists at that site.
- (b) For the purposes of this subpart, an existing affected source is any affected source that is not a new affected source.
14. Calculating Organic HAP Emissions Factors for Open Molding and Centrifugal Casting
- 40 CFR 63.5796 What are the organic HAP emissions factor equations in Table 1 to this subpart, and how are they used in this subpart?
- Emissions factors are used in this subpart to determine compliance with certain organic HAP emissions limits in Tables 3 and 5 to this subpart. You may use the equations in Table 1 to this subpart to calculate your emissions factors. Equations are available for each open molding operation and centrifugal casting operation and have units of pounds of organic HAP emitted per ton (lb/ton) of resin or gel coat applied. These equations are intended to provide a method for you to demonstrate compliance without the need to conduct for a HAP emissions test. In lieu of these equations, you can elect to use site-specific organic HAP emissions factors to demonstrate compliance provided your site-specific organic HAP emissions factors are incorporated in the facility's air emissions permit and are based on actual facility HAP emissions test data. You may also use the organic HAP emissions factors calculated using the equations in Table 1 to this subpart, combined with resin and gel coat use data, to calculate your organic HAP emissions.
15. 40 CFR 63.5797 How do I determine the organic HAP content of my resins and gel coats?
- In order to determine the organic HAP content of resins and gel coats, you may rely on information provided by the material manufacturer, such as manufacturer's formulation data and material safety data sheets (MSDS), using the procedures specified in paragraphs (a) through (c) of this section, as applicable.
- (a) Include in the organic HAP total each organic HAP that is present at 0.1 percent by mass or more for Occupational Safety and Health Administration-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other organic HAP compounds.
- (b) If the organic HAP content is provided by the material supplier or manufacturer as a range, you must use the upper limit of the range for determining compliance. If a separate measurement of the total organic HAP content, such as an analysis of the material by EPA Method 311 of appendix A to 40 CFR part 63, exceeds the upper limit of the range of the total organic HAP content provided by the material supplier or manufacturer, then you must use the measured organic HAP content to determine compliance.
- (c) If the organic HAP content is provided as a single value, you may use that value to determine compliance. If a separate measurement of the total organic HAP content is made and is less than 2 percentage points higher than the value for total organic HAP content provided by the material supplier or manufacturer, then you still may use the provided value to demonstrate compliance. If the measured total organic HAP content exceeds the provided value by 2 percentage points or more, then you must use the measured organic HAP content to determine compliance.
16. 40 CFR 63.5798 What if I want to use, or I manufacture, an application technology (new or existing) whose organic HAP emissions characteristics are not represented by the equations in Table 1 to this subpart?
- If you wish to use a resin or gel coat application technology (new or existing), whose emission characteristics are not represented by the equations in Table 1 to this subpart, you may use the procedures in paragraphs (a) or (b) of this section to establish an organic HAP emissions factor. This organic HAP emissions factor may then be used to determine compliance with the emission limits in this subpart, and to calculate facility organic HAP emissions.
- (a) Perform a organic HAP emissions test to determine a site-specific organic HAP emissions factor using the test procedures in 40 CFR 63.5850.
- (b) Submit a petition to the Administrator for administrative review of this subpart. This petition must contain a description of the resin or gel coat application technology and supporting organic HAP emissions test data obtained using EPA test methods or their equivalent. The emission test data should be obtained using a range of resin or gel coat HAP contents to demonstrate the effectiveness of the technology under the different conditions, and to demonstrate that the technology will be effective at different sites. We will review the submitted data, and, if appropriate, update the equations in Table 1 to this subpart.
17. 40 CFR 63.5799 How do I calculate my facility's organic HAP emissions on a tpy basis for purposes of determining which paragraphs of 40 CFR 63.5805 apply?
- To calculate your facility's organic HAP emissions in tpy for purposes of determining which paragraphs in 40 CFR 63.5805 apply to you, you must use the procedures in either paragraph (a) of this section for new facilities prior to startup, or paragraph (b) of this section for existing facilities and new facilities after startup. You are not required to calculate or report emissions under this section if you are an existing facility that does not have centrifugal casting or continuous lamination/casting operations, or a new facility that does not have any of the following operations: Open molding, centrifugal casting, continuous lamination/casting, pultrusion, SMC and BMC manufacturing, and mixing. Emissions calculation and emission reporting procedures in other sections of this subpart still apply. Calculate organic HAP emissions prior to any add-on control device, and do not include organic HAP emissions from any resin or gel coat used in operations subject to the Boat Manufacturing NESHAP, 40 CFR part 63, subpart VVVV, or from the manufacture of large parts as defined in 40 CFR 63.5805(d)(2). For centrifugal casting operations at existing facilities, do not include any organic HAP emissions where resin or gel coat is applied to an open centrifugal mold using open molding application techniques. Table 1 and the Table 1 footnotes to this subpart present more information on calculating centrifugal casting organic HAP emissions. The timing and reporting of these calculations is discussed in paragraph (c) of this section.
- (a) For new facilities prior to startup, calculate a weighted average organic HAP emissions factor for the

operations specified in 40 CFR 63.5805(b) and (d) on a lbs/ton of resin and gel coat basis. Base the weighted average on your projected operation for the 12 months subsequent to facility startup. Multiply the weighted average organic HAP emissions factor by projected resin use over the same period. You may calculate your organic HAP emissions factor based on the factors in Table 1 to this subpart, or you may use any HAP emissions factor approved by us, such as factors from the Compilation of Air Pollutant Emissions Factors, Volume I: Stationary Point and Area Sources (AP-42), or organic HAP emissions test data from similar facilities.

- (b) For existing facilities and new facilities after startup, you may use the procedures in either paragraph (b)(1) or (2) of this section. If the emission factors for an existing facility have changed over the period of time prior to their initial compliance date due to incorporation of pollution-prevention control techniques, existing facilities may base the average emission factor on their operations as they exist on the compliance date. If an existing facility has accepted an enforceable permit limit of less than 100 tons per year of HAP, and can demonstrate that they will operate at that level subsequent to the compliance date, they can be deemed to be below the 100 tpy threshold.

(1) Use a calculated emission factor. Calculate a weighted average organic HAP emissions factor on a lbs/ton of resin and gel coat basis. Base the weighted average on the prior 12 months of operation. Multiply the weighted average organic HAP emissions factor by resin and gel coat use over the same period. You may calculate this organic HAP emissions factor based on the equations in Table 1 to this subpart, or you may use any organic HAP emissions factor approved by us, such as factors from AP-42, or site-specific organic HAP emissions factors if they are supported by HAP emissions test data.

(2) Conduct performance testing. Conduct performance testing using the test procedures in 40 CFR 63.5850 to determine a site-specific organic HAP emissions factor in units of lbs/ton of resin and gel coat used. Conduct the test under conditions expected to result in the highest possible organic HAP emissions. Multiply this factor by annual resin and gel coat use to determine annual organic HAP emissions. This calculation must be repeated and reported annually.

- (c) Existing facilities must initially perform this calculation based on their 12 months of operation prior to April 21, 2003, and include this information with their initial notification report. Existing facilities must repeat the calculation based on their resin and gel coat use in the 12 months prior to their initial compliance date, and submit this information with their initial compliance report. After their initial compliance date, existing and new facilities must recalculate organic HAP emissions over the 12-month period ending June 30 or December 31, whichever date is the first date following their compliance date specified in 40 CFR 63.5800. Subsequent calculations should cover the periods in the semiannual compliance reports.

18. Compliance Dates and Standards

40 CFR 63.5800 When do I have to comply with this subpart?

You must comply with the standards in this subpart by the dates specified in Table 2 to this subpart. Facilities meeting a organic HAP emissions standard based on a 12-month rolling average must begin collecting data on the compliance date in order to demonstrate compliance.

19. 40 CFR 63.5805 What standards must I meet to comply with this subpart?

You must meet the requirements of paragraphs (a) through (h) of this section that apply to you. You may elect to comply using any options to meeting these standards described in 40 CFR 63.5810 through 40 CFR 63.5830. Use the procedures in 40 CFR 63.5799 to determine if you meet or exceed the 100 tpy threshold.

- (a) If you have an existing facility that does not have any centrifugal casting or continuous lamination/casting operations, or an existing facility that does have centrifugal casting or continuous lamination/casting operations, but the combination of all centrifugal casting and continuous lamination/casting operations emit less than 100 tpy of HAP, you must meet the annual average organic HAP emissions limits in Table 3 to this subpart and the work practice standards in Table 4 to this subpart that apply to you.
- (b) If you have an existing facility that emits 100 tpy or more of HAP from the combination of all centrifugal casting and continuous lamination/casting operations, you must reduce the total organic HAP emissions from these operations by at least 95 percent by weight and meet any applicable work practice standards in Table 4 to this subpart that apply to you. Operations other than centrifugal casting, and continuous lamination/casting, must meet the requirements in Tables 3 and 4 to this subpart. As an alternative to meeting 95 percent by weight, you may meet the organic HAP emissions limits in Table 5 to this subpart. If you have a continuous lamination/casting operation, that operation may alternatively meet a organic HAP emissions limit of 1.47 lbs/ton of neat resin plus and neat gel coat plus applied. For centrifugal casting, the percent reduction requirement does not apply to organic HAP emissions that occur during resin application onto an open centrifugal casting mold using open molding application techniques.
- (c) If you have a new facility that emits less than 100 tpy of HAP from the combination of all open molding, centrifugal casting, continuous lamination/casting, pultrusion, SMC manufacturing, mixing, and BMC manufacturing, you must meet the annual average organic HAP emissions limits in Table 3 to this subpart and the work practice standards in Table 4 to this subpart that apply to you.
- (d) (1) Except as provided in paragraph (d)(2) of this section, if you have a new facility that emits 100 tpy or more of HAP from the combination of all open molding, centrifugal casting, continuous lamination/casting, pultrusion, SMC manufacturing, mixing, and BMC manufacturing, you must reduce the total organic HAP emissions from these operations by at least 95 percent by weight and meet any applicable work practice standards in Table 4 to this subpart that apply to you. As an alternative to meeting 95 percent by weight, you may meet the organic HAP emissions limits in Table 5 to this subpart. If you have a continuous lamination/casting operation, that operation may alternatively meet a organic HAP emissions limit of 1.47 lbs/ton of neat resin plus and neat gel coat plus applied.

(2)(i) If your new facility manufactures large reinforced plastic composites parts using open molding or pultrusion operations, the specific open molding and pultrusion operations used to produce large parts are not required to reduce HAP emissions by 95 weight percent, but must meet the emission limits in Table 3 to this subpart.

- (ii) A large open molding part is defined as a part that, when the final finished part is enclosed in the smallest rectangular six-sided box into which the part can fit, the total interior volume of the box exceeds 250 cubic feet, or any interior sides of the box exceed 50 square feet.
 - (iii) A large pultruded part is a part that exceeds an outside perimeter of 24 inches or has more than 350 reinforcements.
- (e) If you have a new or existing facility subject to paragraphs (a) or (c) of this section at their initial compliance date, that subsequently meets or exceeds the 100 tpy threshold in any calendar year, you must notify your permitting authority in your compliance report. You may at the same time request a one-time exemption from the requirements of paragraphs (b) or (d) of this section in your compliance report if you can demonstrate all of the following:
- (1) The exceedance of the threshold was due to circumstances that will not to be repeated.
 - (2) The average annual organic HAP emissions from the potentially affected operations for the last 3 years were below 100 tpy.
 - (3) Projected organic HAP emissions for the next calendar year are below 100 tpy, based on projected resin and gel coat use and the HAP emission factors calculated according to the procedures in 40 CFR 63.5799.
- (f) If you apply for an exemption in paragraph (e) of this section, and subsequently exceed the HAP emission thresholds specified in paragraphs (a) or (c) of this section over the next 12-month period, you must notify the permitting authority in your semi-annual report, the exemption is removed, and your facility must comply with paragraphs (b) or (d) of this section within 3 years from the time your organic HAP emissions first exceeded the threshold.
- (g) If you have repair operations subject to this subpart as defined in 40 CFR 63.5785, these repair operations must meet the requirements in Tables 3 and 4 to this subpart, and are not required to meet the 95 percent organic HAP emissions reduction requirements in paragraphs (b) or (d) of this section.
- (h) If you use an add-on control device to comply with this subpart, you must meet all requirements contained in 40 CFR part 63, subpart SS.

20. Options for Meeting Standards

40 CFR 63.5810 What are my options for meeting the standards for open molding and centrifugal casting operations at new and existing sources?

You must use one of the following methods in paragraphs (a) through (d) of this section to meet the standards in 40 CFR 63.5805. When you are complying with an emission limit in Tables 3 or 5 to this subpart, you may use any control method that reduces organic HAP emissions, including reducing resin and gel coat organic HAP content, changing to nonatomized mechanical application, covered curing techniques, and routing part or all of your emissions to an add-on control. The necessary calculations must be completed within 30 days after the end of each month. You may switch between the compliance options in paragraphs (a) through (d) of this section. When you change to an option based on a 12-month rolling average, you must base the average on the previous 12 months of data calculated using the compliance option you are currently using unless you were using the compliant materials option in paragraph (d) of this section. In this case, you must immediately begin collecting resin and gel coat use data and demonstrate compliance 12 months after changing options.

- (a) Meet the individual organic HAP emissions limits for each operation. Demonstrate that you meet the individual organic HAP emissions limits for each open molding operation and for each centrifugal casting operation type in Tables 3, or 5 to this subpart that apply to you. This is done in two steps. First, determine an organic HAP factor for each individual resin and gel coat, application method, and control method you use in a particular operation. Second, calculate, for each particular operation type, a weighted average of those organic HAP emissions factors based on resin and gel coat use. Your calculated organic HAP emissions factor must either be at or below the applicable organic HAP emissions limit in Tables 3 or 5 to this subpart based on a 12-month rolling average. Use the procedures described in paragraphs (a)(1) through (3) of this section to calculate average organic HAP emissions factors for each of your operations.

(1) Calculate your actual organic HAP emissions factor for each different process stream within each operation type. A process stream is defined as each individual combination of resin or gel coat, application technique, and control technique. Process streams within operations types are considered different from each other if any of the following three characteristics vary: The neat resin plus or neat gel coat plus organic HAP content, the application technique, or the control technique. You must calculate organic HAP emissions factors for each different process stream by using the appropriate equations in Table 1 to this subpart for open molding and for centrifugal casting, or site-specific organic HAP emissions factors discussed in 40 CFR 63.5796. If you want to use vapor suppressants to meet the organic HAP emissions limit for open molding, you must determine the vapor suppressant effectiveness by conducting testing according to the procedures specified of appendix A to subpart WWWW of 40 CFR part 63. If you want to use an add-on control device to meet the organic HAP emissions limit, you must determine the add-on control factor by conducting capture and control efficiency testing, using the procedures specified in 40 CFR 63.5850. The organic HAP emissions factor calculated from the equations in Table 1 to this subpart, or site-specific emissions factors, is multiplied by the add-on control factor to calculate the organic HAP emissions factor after control. Use Equation 1 of this

section to calculate the add-on control factor used in the organic HAP emissions factor equations.

Equation 1 of 40 CFR 63.5810(a)(1) is included in the text of Attachment 1 hereto, and is hereby incorporated into this paragraph as if fully written.

(2) Calculate your actual operation organic HAP emissions factor for the last 12 months for each open molding operation type and for each centrifugal casting operation type by calculating the weighted average of the individual process stream organic HAP emissions factors within each respective operation. To do this, sum the product of each individual organic HAP emissions factor calculated in paragraph (a)(1) of this section and the amount of neat resin plus and neat gel coat plus usage that correspond to the individual factors and divide the numerator by the total amount of neat resin plus and neat gel coat plus used in that operation type. Use Equation 2 of this section to calculate your actual organic HAP emissions factor for each open molding operation type and each centrifugal casting operation type.

Equation 2 of 40 CFR 63.5810(a)(2) is included in the text of Attachment 1 hereto, and is hereby incorporated into this paragraph as if fully written.

(3) Compare each organic HAP emissions factor calculated in paragraph (b)(2) of this section with its corresponding organic HAP emissions limit in Tables 3 or 5 to this subpart. If all emissions factors are equal to or less than their corresponding emission limits, then you are in compliance.

(b) HAP emissions factor averaging option. Demonstrate each month that you meet each weighted average of the organic HAP emissions limits in Tables 3 or 5 to this subpart that apply to you. When using this option, you must demonstrate compliance with the weighted average organic HAP emissions limit for all your open molding operations, and then separately demonstrate compliance with the weighted average organic HAP emissions limit for all your centrifugal casting operations. Open molding operations and centrifugal casting operations may not be averaged with each other.

(1) Each month calculate the weighted average organic HAP emissions limit for all open molding operations and the weighted average organic HAP emissions limit for all centrifugal casting operations for your facility for the last 12-month period to determine the organic HAP emissions limit you must meet. To do this, multiply the individual organic HAP emissions limits in Tables 3 or 5 to this subpart for each open molding (centrifugal casting) operation type by the amount of neat resin plus or neat gel coat plus used in the last 12 months for each open molding (centrifugal casting) operation type, sum these results, and then divide this sum by the total amount of neat resin plus and neat gel coat plus used in open molding (centrifugal casting) over the last 12 months. Use Equation 3 of this section to calculate the weighted average organic HAP emissions limit for all open molding operations and separately for all centrifugal casting operations.

Equation 3 of 40 CFR 63.5810(b)(1) is included in the text of Attachment 1 hereto, and is hereby incorporated into this paragraph as if fully written.

(2) Each month calculate your actual weighted average organic HAP emissions factor for open molding and centrifugal casting. To do this, multiply your actual open molding (centrifugal casting) operation organic HAP emissions factors and the amount of neat resin plus and neat gel coat plus used in each open molding (centrifugal casting) operation type, sum the results, and divide this sum by the total amount of neat resin plus and neat gel coat plus used in open molding (centrifugal casting) operations. You must calculate your actual individual HAP emissions factors for each operation type as described in paragraphs (a)(1) and (2) of this section. Use Equation 4 of this section to calculate your actual weighted average organic HAP emissions factor.

Equation 4 of 40 CFR 63.5810(b)(2) is included in the text of Attachment 1 hereto, and is hereby incorporated into this paragraph as if fully written.

(3) Compare the values calculated in paragraphs (b)(1) and (2) of this section. If each 12-month rolling average organic HAP emissions factor is less than or equal to the corresponding 12-month rolling average organic HAP emissions limit, then you are in compliance.

(c) If you have multiple operation types, meet the organic HAP emissions limit for one operation type, and use the same resin(s) for all operations of that resin type. If you have more than one operation type, you may meet the emission limit for one of those operations, and use the same resin(s) in all other open molding and centrifugal casting operations.

(1) This option is limited to resins of the same type. The resin types for which this option may be used are noncorrosion-resistant, corrosion-resistant and/or high strength, and tooling.

2) For any combination of manual resin application, mechanical resin application, filament application, or centrifugal casting, you may elect to meet the organic HAP emissions limit for any one of these operations and use that operation's same resin in all of the resin operations listed in this paragraph. Table 7 to this subpart presents the possible combinations based on a facility selecting the application process that results in the highest allowable organic HAP content resin. If your resin organic HAP content is below the applicable values shown in Table 7 to this subpart, you are in compliance.

(3) You may also use a weighted average organic HAP content for each operation described in paragraph (c)(2) of this section. Calculate the weighted average organic HAP content monthly. Use Equation 2 in 40 CFR 63.5810(a)(2) except substitute organic HAP content for organic HAP emissions factor. You are in compliance if the weighted average organic HAP content based on the last 12 months of resin use is less than or equal to the applicable organic HAP contents in Table 7 to this subpart.

(4) You may simultaneously use the averaging provisions in paragraph (b) of this section to demonstrate compliance for any operations and/or resins you do not include in your compliance demonstrations is paragraphs (c)(2) and (3) of this section. However, any resins for which you claim compliance under the option in paragraphs (c)(2) and (3) of this section may not be included in any of the averaging calculations described in paragraphs (a) or (b) of this section used for resins for which you are not claiming compliance under this option.

(d) Use resins and gel coats that do not exceed the maximum organic HAP contents shown in Table 3 to

this subpart.

21. 40 CFR 63.5820 What are my options for meeting the standards for continuous lamination/casting operations?

You must use one or more of the options in paragraphs (a) through (d) of this section to meet the standards in 40 CFR 63.5805. Use the calculation procedures in 40 CFR 63.5865 through 40 CFR 63.5890.

- (a) Compliant line option. Demonstrate that each continuous lamination line and each continuous casting line complies with the applicable standard.
- (b) Averaging option. Demonstrate that all continuous lamination and continuous casting lines combined, comply with the applicable standard.
- (c) Add-on control device option. If your operation must meet the 58.5 weight percent organic HAP emissions reduction limit in Table 3 to this subpart, you have the option of demonstrating that you achieve 95 percent reduction of all wet-out area organic HAP emissions.
- (d) Combination option. Use any combination of options in paragraphs (a) and (b) of this section or, for affected sources at existing facilities, any combination of options in paragraphs (a), (b), and (c) of this section (in which one or more lines meet the standards on their own, two or more lines averaged together meet the standards, and one or more lines have their wet-out areas controlled to a level of 95 percent).

22. 40 CFR 63.5830 What are my options for meeting the standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reductions requirement?

You must use one or more of the options in paragraphs (a) through (e) of this section to meet the 60 weight percent organic HAP emissions limit in Table 3 to this subpart, as required in 40 CFR 63.5805.

- (a) Achieve an overall reduction in organic HAP emissions of 60 weight percent by capturing the organic HAP emissions and venting them to a control device or any combination of control devices. Conduct capture and destruction efficiency testing as specified in 63.5850 to this subpart to determine the percent organic HAP emissions reduction.
- (b) Design, install, and operate wet area enclosures and resin drip collection systems on pultrusion machines that meet the criteria in paragraphs (b)(1) through (10) of this section.

(1) The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die(s). The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.

(2) For open bath pultrusion machines with a radio frequency pre-heat unit, the enclosure must extend from the beginning of the resin bath to within 12.5 inches or less of the entrance of the radio frequency pre-heat unit. If the stock that is within 12.5 inches or less of the entrance to the radio frequency pre-heat unit has any drip, it must be enclosed. The stock exiting the radio frequency pre-heat unit is not required to be in an enclosure if the stock has no drip between the exit of the radio frequency pre-heat unit to within 0.5 inches of the entrance of the die.

(3) For open bath pultrusion machines without a radio frequency pre-heat unit, the enclosure must extend from the beginning of the resin bath to within 0.5 inch or less of the die entrance.

(4) For pultrusion lines with a pre-wet area prior to direct die injection, the enclosure must extend from the point at which the resin is applied to the reinforcement to within 12.5 inches or less of the entrance of the die(s). If the stock that is within 12.5 inches or less of the entrance to the die has any drip, it must be enclosed.

(5) The total open area of the enclosure must not exceed two times the cross sectional area of the puller window(s) and must comply with the requirements in paragraphs (b)(5)(i) through (iii) of this section.

- (i) All areas that are open need to be included in the total open area calculation with the exception of access panels, doors, and/or hatches that are part of the enclosure.
- (ii) The area that is displaced by entering reinforcement or exiting product is considered open.
- (iii) Areas that are covered by brush covers are considered closed.

(6) Open areas for level control devices, monitoring devices, agitation shafts, and fill hoses must have no more than 1.0 inch clearance.

(7) The access panels, doors, and/or hatches that are part of the enclosure must close tightly. Damaged access panels, doors, and/or hatches that do not close tightly must be replaced.

(8) The enclosure may not be removed from the pultrusion line, and access panels, doors, and/or hatches that are part of the enclosure must remain closed whenever resin is in the bath, except for the time period discussed in paragraph (b)(9) of this section.

(9) The maximum length of time the enclosure may be removed from the pultrusion line or the access panels, doors, and/or hatches and may be open, is 30 minutes per 8 hour shift, 45 minutes per 12 hour shift, or 90 minutes per day if the machine is operated for 24 hours in a day. The time restrictions do not apply if the open doors or panels do not cause the limit of two times the puller window area to be exceeded. Facilities may average the times that access panels, doors, and/or hatches are open across all operating lines. In that case the average must not exceed the times shown in this paragraph (b)(9). All lines included in the average must have operated the entire time period being averaged.

(10) No fans, blowers, and/or air lines may be allowed within the enclosure. The enclosure must not be ventilated.

- (c) Use direct die injection pultrusion machines with resin drip collection systems that meet all the criteria specified in paragraphs (c)(1) through (3) of this section.
 - (1) All the resin that is applied to the reinforcement is delivered directly to the die.
 - (2) No exposed resin is present, except at the face of the die.
 - (3) Resin drip is captured in closed piping and recycled directly to the resin injection chamber.
- (d) Use a preform injection system that meets the definition in 40 CFR 63.5935
- (e) Use any combination of options in paragraphs (a) through (d) of this section in which different pultrusion lines comply with different options described in paragraphs (a) through (d) of this section, and
 - (1) Each individual pultrusion machine meets the 60 percent reduction requirement, or
 - (2) The weighted average reduction based on resin throughout of all machines combined is 60 percent. For purposes of the average percent reduction calculation, wet area enclosures reduce organic HAP emissions by 60 percent, and direct die injection and preform injection reduce organic HAP emissions by 90 percent.

23. General Compliance Requirements

40 CFR 63.5835 What are my general requirements for complying with this subpart?

- (a) You must be in compliance at all times with the work practice standards in Table 4 to this subpart, as well as the organic HAP emissions limits in Tables 3, or 5, or the organic HAP content limits in Table 7 to this subpart, as applicable, that you are meeting without the use of add-on controls.
- (b) You must be in compliance with all organic HAP emissions limits in this subpart that you meet using add-on controls, except during periods of startup, shutdown, and malfunction.
- (c) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(e)(1)(i).
- (d) You must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in 40 CFR 63.6(e)(3) for any organic HAP emissions limits you meet using an add-on control.

24. Testing and Initial Compliance Requirements

40 CFR 63.5840 By what date must I conduct a performance test or other initial compliance demonstration?

You must conduct performance tests, performance evaluations, design evaluations, capture efficiency testing, and other initial compliance demonstrations by the compliance date specified in Table 2 to this subpart, with three exceptions. Open molding and centrifugal casting operations that elect to meet a organic HAP emissions limit on a 12-month rolling average must initiate collection of the required data on the compliance date, and demonstrate compliance 1 year after the compliance date. New sources that use add-on controls to initially meet compliance must demonstrate compliance within 180 days after their compliance date.

25. 40 CFR 63.5845 When must I conduct subsequent performance tests?

You must conduct a performance test every 5 years following the initial performance test for any standard you meet with an add-on control device.

26. 40 CFR 63.5850 How do I conduct performance tests, performance evaluations, and design evaluations?

- (a) If you are using any add-on controls to meet a organic HAP emissions limit in this subpart, you must conduct each performance test, performance evaluation, and design evaluation in 40 CFR part 63, subpart SS, that applies to you. The basic requirements for performance tests, performance evaluations, and design evaluations are presented in Table 6 to this subpart.
- (b) Each performance test must be conducted according to the requirements in 40 CFR 63.7(e)(1) and under the specific conditions that 40 CFR part 63, subpart SS, specifies.
- (c) Each performance evaluation must be conducted according to the requirements in 40 CFR 63.8(e) as applicable and under the specific conditions that 40 CFR part 63, subpart SS, specifies.
- (d) You may not conduct performance tests or performance evaluations during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).
- (e) You must conduct the control device performance test using the emission measurement methods specified in paragraphs (e)(1) through (5) of this section.
 - (1) Use either Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select the sampling sites.
 - (2) Use Method 2, 2A, 2C, 2D, 2F or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.
 - (3) Use Method 18 of appendix A to 40 CFR part 60 to measure organic HAP emissions or use Method 25A of appendix A to 40 CFR part 60 to measure total gaseous organic emissions as a

surrogate for total organic HAP emissions. If you use Method 25A, you must assume that all gaseous organic emissions measured as carbon are organic HAP emissions. If you use Method 18 and the number of organic HAP in the exhaust stream exceeds five, you must take into account the use of multiple chromatographic columns and analytical techniques to get an accurate measure of at least 90 percent of the total organic HAP mass emissions. Do not use Method 18 to measure organic HAP emissions from a combustion device; use instead Method 25A and assume that all gaseous organic mass emissions measured as carbon are organic HAP emissions.

(4) You may use American Society for Testing and Materials (ASTM) D6420-99 (available for purchase from at least one of the following addresses: 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.) in lieu of Method 18 of 40 CFR part 60, appendix A, under the conditions specified in paragraphs (c) (4)(i) through (iii) of this section.

- (i) If the target compound(s) is listed in Section 1.1 of ASTM D6420-99 and the target concentration is between 150 parts per billion, by volume and 100 parts per million, by volume.
- (ii) If the target compound(s) is not listed in Section 1.1 of ASTM D6420-99, but is potentially detected by mass spectrometry, an additional system continuing calibration check after each run, as detailed in Section 10.5.3 of ASTM D6420-99, must be followed, met, documented, and submitted with the performance test report even if you do not use a moisture condenser or the compound is not considered soluble.
- (iii) If a minimum of one sample/analysis cycle is completed at least every 15 minutes.

(5) Use the procedures in EPA Method 3B of appendix A to 40 CFR part 60 to determine an oxygen correction factor if required by 40 CFR 63.997(e)(2)(iii)(C). You may use American Society of Mechanical Engineers (ASME) PTC 19-10-1981-Part 10 (available for purchase from ASME, P.O. Box 2900, 22 Law Drive, Fairfield, New Jersey, 07007-2900, or online at www.asme.org/catalog) as an alternative to EPA Method 3B of appendix A to 40 CFR part 60.

- (f) The control device performance test must consist of three runs and each run must last at least 1 hour. The production conditions during the test runs must represent normal production conditions with respect to the types of parts being made and material application methods. The production conditions during the test must also represent maximum potential emissions with respect to the organic HAP content of the materials being applied and the material application rates.
- (g) If you are using a concentrator/oxidizer control device, you must test the combined flow upstream of the concentrator, and the combined outlet flow from both the oxidizer and the concentrator to determine the overall control device efficiency. If the outlet flow from the concentrator and oxidizer are exhausted in separate stacks, you must test both stacks simultaneously with the inlet to the concentrator to determine the overall control device efficiency.
- (h) During the test, you must also monitor and record separately the amounts of production resin, tooling resin, pigmented gel coat, clear gel coat, and tooling gel coat applied inside the enclosure that is vented to the control device.

27. 40 CFR 63.5855 What are my monitor installation and operation requirements?

You must monitor and operate all add-on control devices according to the procedures in 40 CFR part 63, subpart SS.

28. 40 CFR 63.5860 How do I demonstrate initial compliance with the standards?

- (a) You demonstrate initial compliance with each organic HAP emissions standard in paragraphs (a) through (h) of 40 CFR 63.5805 that applies to you by using the procedures shown in Tables 8 and 9 to this subpart.
- (b) If using an add-on control device to demonstrate compliance, you must also establish each control device operating limit in 40 CFR part 63, subpart SS, that applies to you.

29. Emission Factor, Percent Reduction, and Capture Efficiency Calculation Procedures for Continuous Lamination/Casting Operations

40 CFR 63.5865 What data must I generate to demonstrate compliance with the standards for continuous lamination/casting operations?

- (a) For continuous lamination/casting affected sources complying with a percent reduction requirement, you must generate the data identified in Tables 10 and 11 to this subpart for each data requirement that applies to your facility.
- (b) For continuous lamination/casting affected sources complying with a lbs/ton limit, you must generate the data identified in Tables 11 and 12 to this subpart for each data requirement that applies to your facility.

30. 40 CFR 63.5870 How do I calculate annual uncontrolled and controlled organic HAP emissions from my wet-out area(s) and from my oven(s) for continuous lamination/casting operations?

To calculate your annual uncontrolled and controlled organic HAP emissions from your wet-out areas and from your ovens, you must develop uncontrolled and controlled wet-out area and uncontrolled and controlled oven organic HAP emissions estimation equations or factors to apply to each formula applied on each line, determine how much of each formula for each end product is applied each year on each line, and assign uncontrolled and controlled wet-out area and uncontrolled and controlled oven organic HAP emissions estimation equations or factors to each formula. You must determine the overall capture efficiency using the procedures in 40 CFR 63.5850 to this subpart.

- (a) To develop uncontrolled and controlled organic HAP emissions estimation equations and factors, you must, at a minimum, do the following, as specified in paragraphs (a)(1) through (6) of this section:
- (1) Identify each end product and the thickness of each end product produced on the line. Separate end products into the following end product groupings, as applicable: corrosion-resistant gel coated end products, noncorrosion-resistant gel coated end products, corrosion-resistant nongel coated end products, and noncorrosion-resistant nongel coated end products. This step creates end product/thickness combinations.
 - (2) Identify each formula used on the line to produce each end product/thickness combination. Identify the amount of each such formula applied per year. Rank each formula used to produce each end product/thickness combination according to usage within each end product/thickness combination.
 - (3) For each end product/thickness combination being produced, select the formula with the highest usage rate for testing.
 - (4) If not already selected, also select the worst-case formula (likely to be associated with the formula with the highest organic HAP content, type of HAP, application of gel coat, thin product, low line speed, higher resin table temperature) amongst all formulae. (You may use the results of the worst-case formula test for all formulae if desired to limit the amount of testing required.)
 - (5) For each formula selected for testing, conduct at least one test (consisting of three runs). During the test, track information on organic HAP content and type of HAP, end product thickness, line speed, and resin temperature on the wet-out area table.
 - (6) Using the test results, develop uncontrolled and controlled organic HAP emissions estimation equations (or factors) or series of equations (or factors) that best fit the results for estimating uncontrolled and controlled organic HAP emissions, taking into account the organic HAP content and type of HAP, end product thickness, line speed, and resin temperature on the wet-out area table.
- (b) In lieu of using the method specified in paragraph (a) of this section for developing uncontrolled and controlled organic HAP emissions estimation equations and factors, you may either method specified in paragraphs (b)(1) and (2) of this section, as applicable.
- (1) For either uncontrolled or controlled organic HAP emissions estimates, you may use previously established, facility-specific organic HAP emissions equations or factors, provided they allow estimation of both wet-out area and oven organic HAP emissions, where necessary, and have been approved by your permitting authority. If a previously established equation or factor is specific to the wet-out area only, or to the oven only, then you must develop the corresponding uncontrolled or controlled equation or factor for the other organic HAP emissions source.
- (2) For uncontrolled (controlled) organic HAP emissions estimates, you may use controlled (uncontrolled) organic HAP emissions estimates and control device destruction efficiency to calculate your uncontrolled (controlled) organic HAP emissions provided the control device destruction efficiency was calculated at the same time you collected the data to develop your facility's controlled (uncontrolled) organic HAP emissions estimation equations and factors.
- (c) Assign to each formula an uncontrolled organic HAP emissions estimation equation or factor based on the end product/thickness combination for which that formula is used.
- (d) (1) To calculate your annual uncontrolled organic HAP emissions from wet-out areas that do not have any capture and control and from wet-out areas that are captured by an enclosure but are vented to the atmosphere and not to a control device, multiply each formula's annual usage by its appropriate organic HAP emissions estimation equation or factor and sum the individual results.
- (2) To calculate your annual uncontrolled organic HAP emissions that escape from the enclosure on the wet-out area, multiply each formula's annual usage by its appropriate uncontrolled organic HAP emissions estimation equation or factor, sum the individual results, and multiply the summation by 1 minus the percent capture (expressed as a fraction).
- (3) To calculate your annual uncontrolled oven organic HAP emissions, multiply each formula's annual usage by its appropriate uncontrolled organic HAP emissions estimation equation or factor and sum the individual results.
- (4) To calculate your annual controlled organic HAP emissions, multiply each formula's annual usage by its appropriate organic HAP emissions estimation equation or factor and sum the individual results to obtain total annual controlled organic HAP emissions.
- (e) Where a facility is calculating both uncontrolled and controlled organic HAP emissions estimation equations and factors, you must test the same formulae. In addition, you must develop both sets of equations and factors from the same tests.
31. 40 CFR 63.5875 How do I determine the capture efficiency of the enclosure on my wet-out area and the capture efficiency of my oven(s) for continuous lamination/casting operations?
- (a) The capture efficiency of a wet-out area enclosure is assumed to be 100 percent if it meets the design and operation requirements for a permanent total enclosure (PTE) specified in EPA Method 204 of appendix M to 40 CFR part 51. If a PTE does not exist, then a temporary total enclosure must be constructed and verified using EPA Method 204, and capture efficiency testing must be determined using EPA Methods 204B through E of appendix M to 40 CFR part 51.
 - (b) The capture efficiency of an oven is to be considered 100 percent, provided the oven is operated

under negative pressure.

32. 40 CFR 63.5880 How do I determine how much neat resin plus is applied to the line and how much neat gel coat plus is applied to the line for continuous lamination/casting operations?

Use the following procedures to determine how much neat resin plus and neat gel coat plus is applied to the line each year.

- (a) Track formula usage by end product/thickness combinations.
- (b) Use in-house records to show usage. This may be either from automated systems or manual records.
- (c) Record daily the usage of each formula/end product combination on each line. This is to be recorded at the end of each run (i.e., when a changeover in formula or product is made) and at the end of each shift.
- (d) Sum the amounts from the daily records to calculate annual usage of each formula/end product combination by line.

33. 40 CFR 63.5885 How do I calculate percent reduction to demonstrate compliance for Continuous Lamination/Casting Operations?

You may calculate percent reduction using any of the methods in paragraphs (a) through (d) of this section.

- (a) Compliant line option. If all of your wet-out areas have PTE that meet the requirements of EPA Method 204 of appendix M of 40 CFR part 51, and all of your wet-out area organic HAP emissions and oven organic HAP emissions are vented to an add-on control device, use Equation 1 of this section to demonstrate compliance. In all other situations, use Equation 2 of this section to demonstrate compliance.

Equation 1 of 40 CFR 63.5885(a) is included in the text of Attachment 1 hereto, and is hereby incorporated into this paragraph as if fully written.

Equation 2 of 40 CFR 63.5885(a) is included in the text of Attachment 1 hereto, and is hereby incorporated into this paragraph as if fully written.

- (b) Averaging option. Use Equation 3 of this section to calculate percent reduction.

Equation 3 of 40 CFR 63.5885(b) is included in the text of Attachment 1 hereto, and is hereby incorporated into this paragraph as if fully written.

- (c) Add-on control device option. Use Equation 1 of this section to calculate percent reduction.

- (d) Combination option. Use Equations 1 through 3 of this section, as applicable, to calculate percent reduction.

34. 40 CFR 63.5890 How do I calculate a organic HAP emissions factor to demonstrate compliance for continuous lamination/casting operations?

- (a) Compliant line option. Use Equation 1 of this section to calculate a organic HAP emissions factor in lbs/ton.

Equation 1 of 40 CFR 63.5890(a) is included in the text of Attachment 1 hereto, and is hereby incorporated into this paragraph as if fully written.

- (b) Averaging option. Use Equation 2 of this section to demonstrate compliance.

Equation 2 of 40 CFR 63.5890(b) is included in the text of Attachment 1 hereto, and is hereby incorporated into this paragraph as if fully written.

- (c) Combination option. Use Equations 1 and 2 of this section, as applicable, to demonstrate compliance.

35. Continuous Compliance Requirements

40 CFR 63.5895 How do I monitor and collect data to demonstrate continuous compliance?

- (a) During production, you must collect and keep a record of data as indicated in 40 CFR part 63, subpart SS, if you are using an add-on control device.

- (b) You must monitor and collect data as specified in paragraphs (b)(1) through (4) of this section.

(1) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times that the affected source is operating.

(2) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes to this subpart, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(3) At all times, you must maintain necessary parts for routine repairs of the monitoring equipment.

- (4) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring equipment to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (c) You must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if you are meeting any organic HAP emissions limits based on an organic HAP emissions limit in Tables 3 or 5 to this subpart. You must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if you are meeting any organic HAP content limits in Table 7 to this subpart if you are averaging organic HAP contents. Resin use records may be based on purchase records if you can reasonably estimate how the resin is applied. The organic HAP content records may be based on MSDS or on resin specifications supplied by the resin supplier.
- (d) If you initially demonstrate that all resins and gel coats individually meet the applicable organic HAP emissions limits, or organic HAP content limits, then resin and gel coat use records are not required. However, you must include a statement in each compliance report that all resins and gel coats still meet the organic HAP limits for compliant resins and gel coats shown in Tables 3 or 7 to this subpart. If after this initial demonstration, you change to a higher organic HAP resin or gel coat, or increase the resin or gel coat organic HAP content, or change to a higher-emitting resin or gel coat application method, then you must either again demonstrate that all resins and gel coats still meet the applicable organic HAP emissions limits, or begin collecting resin and gel coat use records and calculate compliance on a 12-month rolling average.
- (e) For each of your pultrusion machines, you must record all times that wet area enclosures doors or covers are open and there is resin present in the resin bath.
36. 40 CFR 63.5900 How do I demonstrate continuous compliance with the standards?
- (a) You must demonstrate continuous compliance with each standard in 40 CFR 63.5805 that applies to you according to the methods specified in paragraphs (a)(1) through (3) of this section.
- (1) Compliance with organic HAP emissions limits for sources using add-on control devices is demonstrated following the procedures in 40 CFR part 63, subpart SS. Sources using add-on controls may also use continuous emissions monitors to demonstrate continuous compliance as an alternative to control parameter monitoring.
- (2) Compliance with organic HAP emissions limits is demonstrated by maintaining a organic HAP emissions factor value less than or equal to the appropriate organic HAP emissions limit listed in Tables 3, or 5 to this subpart, on a 12-month rolling average, or by including in each compliance report a statement that all resins and gel coats meet the appropriate organic HAP emissions limits, as discussed in 40 CFR 63.5895(d).
- (3) Compliance with organic HAP content limits in Table 7 to this subpart is demonstrated by maintaining an average organic HAP content value less than or equal to the appropriate organic HAP contents listed in Table 7 to this subpart, on a 12-month rolling average, or by including in each compliance report a statement that all resins and gel coats individually meet the appropriate organic HAP content limits, as discussed in 40 CFR 63.5895(d).
- (4) Compliance with the work practice standards in Table 4 to this subpart is demonstrated by performing the work practice required for your operation.
- (b) You must report each deviation from each standard in 40 CFR 63.5805 that applies to you. The deviations must be reported according to the requirements in 40 CFR 63.5910.
- (c) Except as provided in paragraph (d) of this section, during periods of startup, shutdown or malfunction, you must meet the organic HAP emissions limits and work practice standards that apply to you.
- (d) When you use an add-on control device to meet standards in 40 CFR 63.5805, you are not required to meet those standards during periods of startup, shutdown, or malfunction, but you must operate your affected source in accordance with the startup, shutdown, and malfunction plan.
- (e) Consistent with 40 CFR 63.6(e) and 40 CFR 63.7(e)(1), deviations that occur during a period of malfunction for those affected sources and standards specified in paragraph (d) of this section are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan. The Administrator will determine whether deviations that occur during a period of startup, shutdown, and malfunction are violations, according to the provisions in 40 CFR 63.6(e).
37. Notifications, Reports, and Records
- 40 CFR 63.5905 What notifications must I submit and when?
- (a) You must submit all of the notifications in Table 13 to this subpart that apply to you by the dates specified in Table 13 to this subpart. The notifications are described more fully in 40 CFR part 63, subpart A, referenced in Table 13 to this subpart.
- (b) If you change any information submitted in any notification, you must submit the changes in writing to the Administrator within 15 calendar days after the change.
38. 40 CFR 63.5910 What reports must I submit and when?
- (a) You must submit each report in Table 14 to this subpart that applies to you.
- (b) Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), you must submit each report by the date specified in Table 14 to this subpart and

according to paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in 40 CFR 63.5800 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in 40 CFR 63.5800.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in 40 CFR 63.5800.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting requirements pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information in paragraphs (c)(1) through (6) of this section:

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of the report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in 40 CFR 63.10(d)(5)(i).

(5) If there are no deviations from any organic HAP emissions limitations (emissions limit and operating limit) that apply to you, and there are no deviations from the requirements for work practice standards in Table 4 to this subpart, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including a continuous emissions monitoring system (CEMS) and an operating parameter monitoring system were out of control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out of control during the reporting period.

(d) For each deviation from a organic HAP emissions limitation (i.e., emissions limit and operating limit) and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMS to comply with the organic HAP emissions limitations or work practice standards in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (4) of this section and in paragraphs (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from a organic HAP emissions limitation (i.e., emissions limit and operating limit) occurring at an affected source where you are using a CMS to comply with the organic HAP emissions limitation in this subpart, you must include the information in paragraphs (c)(1) through (4) of this section and in paragraphs (e)(1) through (12) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in 40 CFR 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction, or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

- (8) An identification of each organic HAP that was monitored at the affected source.
 - (9) A brief description of the process units.
 - (10) A brief description of the CMS.
 - (11) The date of the latest CMS certification or audit.
- (12) A description of any changes in CMS, processes, or controls since the last reporting period.
- (f) You must report if you have exceeded the 100 tpy organic HAP emissions threshold if that exceedance would make your facility subject to 40 CFR 63.5805(b) or (d). Include with this report any request for an exemption under 40 CFR 63.5805(e). If you receive an exemption under 40 CFR 63.5805(e) and subsequently exceed the 100 tpy organic HAP emissions threshold, you must report this exceedance as required in 40 CFR 63.5805(f).
 - (g) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 14 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any organic HAP emissions limitation (including any operating limit) or work practice requirement in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.
 - (h) Submit compliance reports and startup, shutdown, and malfunction reports based on the requirements in Table 14 to this subpart, and not based on the requirements in 40 CFR 63.999.
39. 40 CFR 63.5915 What records must I keep?
- (a) You must keep the records listed in paragraphs (a)(1) through (3) of this section.
 - (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
 - (2) The records in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
 - (3) Records of performance tests, design, and performance evaluations as required in 40 CFR 63.10(b)(2).
 - (b) If you use an add-on control device, you must keep all records required in 40 CFR part 63, subpart SS, to show continuous compliance with this subpart.
 - (c) You must keep all data, assumptions, and calculations used to determine organic HAP emissions factors or average organic HAP contents for operations listed in Tables 3, 5, and 7 to this subpart.
 - (d) You must keep a certified statement that you are in compliance with the work practice requirements in Table 4 to this subpart, as applicable.
 - (e) For a new or existing continuous lamination/casting operation, you must keep the records listed in paragraphs (e)(1) through (4) of this section, when complying with the percent reduction and/or lbs/ton requirements specified in paragraphs (a) through (d) of 40 CFR 63.5805.
 - (1) You must keep all data, assumptions, and calculations used to determine percent reduction and/or lbs/ton as applicable;
 - (2) You must keep a brief description of the rationale for the assignment of an equation or factor to each formula;
 - (3) When using facility-specific organic HAP emissions estimation equations or factors, you must keep all data, assumptions, and calculations used to derive the organic HAP emissions estimation equations and factors and identification and rationale for the worst-case formula; and
 - (4) For all organic HAP emissions estimation equations and organic HAP emissions factors, you must keep documentation that the appropriate permitting authority has approved them.
40. 40 CFR 63.5920 In what form and how long must I keep my records?
- (a) You must maintain all applicable records in such a manner that they can be readily accessed and are suitable for inspection according to 40 CFR 63.10(b)(1).
 - (b) As specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
 - (c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). You can keep the records offsite for the remaining 3 years.
 - (d) You may keep records in hard copy or computer readable form including, but not limited to, paper, microfilm, computer floppy disk, magnetic tape, or microfiche.

41. Other Requirements and Information

40 CFR 63.5925 What parts of the General Provisions apply to me?

Table 15 to this subpart shows which parts of the General Provisions in 40 CFR 63.1 through 40 CFR 63.15 apply to you.

42. 40 CFR 63.5930 Who implements and enforces this subpart?

- (a) This subpart can be administered by us, the EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to administer and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are not delegated.
- (c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c) (1) through (4) of this section:
- (1) Approval of alternatives to the organic HAP emissions standards in 40 CFR 63.5805 under 40 CFR 63.6(g).
 - (2) Approval of major changes to test methods under 40 CFR 63.7(e)(2)(ii) and (f) and as defined in 40 CFR 63.90.
 - (3) Approval of major changes to monitoring under 40 CFR 63.8(f) and as defined in 40 CFR 63.90.
 - (4) Approval of major changes to record keeping and reporting under 40 CFR 63.10(f) and as defined in 40 CFR 63.90.

43. 40 CFR 63.5935 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

Atomized mechanical application means application of resin or gel coat with spray equipment that separates the liquid into a fine mist. This fine mist may be created by forcing the liquid under high pressure through an elliptical orifice, bombarding a liquid stream with directed air jets, or a combination of these techniques.

Bulk molding compound (BMC) means a putty-like molding compound containing resin(s) in a form that is ready to mold. In addition to resins, BMC may contain catalysts, fillers, and reinforcements. Bulk molding compound can be used in compression molding and injection molding operations to manufacture reinforced plastic composites products.

BMC manufacturing means a process that involves the preparation of BMC.

Centrifugal casting means a process for fabricating cylindrical composites, such as pipes, in which composite materials are positioned inside a rotating hollow mandrel and held in place by centrifugal forces until the part is sufficiently cured to maintain its physical shape.

Charge means the amount of SMC or BMC that is placed into a compression or injection mold necessary to complete one mold cycle.

Cleaning means removal of composite materials, such as cured and uncured resin from equipment, finished surfaces, floors, hands of employees, or any other surfaces.

Clear production gel coat means an unpigmented, quicksetting resin used to improve the surface appearance and/or performance of composites. It can be used to form the surface layer of any composites other than those used for molds in tooling operations.

Closed molding means a grouping of processes for fabricating composites in a way that HAP-containing materials are not exposed to the atmosphere except during the material loading stage (e.g., compression molding, injection molding, and resin transfer molding). Processes where the mold is covered with plastic (or equivalent material) prior to resin application, and the resin is injected into the covered mold are also considered closed molding.

Composite means a shaped and cured part produced by using composite materials.

Composite materials means the raw materials used to make composites. The raw materials include styrene containing resins. They may also include gel coat, monomer, catalyst, pigment, filler, and reinforcement.

Compression molding means a closed molding process for fabricating composites in which composite materials are placed inside matched dies that are used to cure the materials under heat and pressure without exposure to the atmosphere. The addition of mold paste or in-mold coating is considered part of the closed molding process. The composite materials used in this process are generally SMC or BMC.

Compression/injection molding means a grouping of processes that involves the use of compression molding and/or injection molding.

Continuous casting means a continuous process for fabricating composites in which composite materials are placed on an in-line conveyor belt to produce cast sheets that are cured in an oven.

Continuous lamination means a continuous process for fabricating composites in which composite materials are typically sandwiched between plastic films, pulled through compaction rollers, and cured in an oven. This

process is generally used to produce flat or corrugated products on an in-line conveyor.

Continuous lamination/casting means a grouping of processes that involves the use of continuous lamination and/or continuous casting.

Controlled emissions means those organic HAP emissions that are vented from a control device to the atmosphere.

Corrosion-resistant gel coat means a gel coat used on a product made with a corrosion resistant resin that has a corrosion-resistant end-use application.

Corrosion-resistant end-use applications means applications where the product is manufactured specifically for an application that requires a level of chemical inertness or resistance to chemical attack above that required for typical reinforced plastic composites products. These applications include, but are not limited to, chemical processing and storage; pulp and paper production; sewer and wastewater treatment; power generation; potable water transfer and storage; food and drug processing; pollution or odor control; metals production and plating; semiconductor manufacturing; petroleum production, refining, and storage; mining; textile production; nuclear materials storage; swimming pools; and cosmetic production, as well as end-use applications that require high strength resins.

Corrosion-resistant industry standard includes the following standards: ASME RTP-1 or Sect. X; ASTM D5364, D3299, D4097, D2996, D2997, D3262, D3517, D3754, D3840, D4024, D4160, D4161, D4162, D4184, D3982, or D3839; ANSI/AWWA C950; UL 215, 1316 or 1746, IAPMO PS-199, or written customer requirements for resistance to specified chemical environments.

Corrosion-resistant product means a product made with a corrosion-resistant resin and is manufactured to a corrosion-resistant industry standard, or a food contact industry standard, or is manufactured for corrosion-resistant end-use applications involving continuous or temporary chemical exposures.

Corrosion-resistant resin means a resin that either:

(1) Displays substantial retention of mechanical properties when undergoing ASTM C-581 coupon testing, where the resin is exposed for 6 months or more to one of the following materials: material with a pH \leq 12.0 or # 3.0, oxidizing or reducing agents, organic solvents, or fuels or additives as defined in 40 CFR 779.2. In the coupon testing, the exposed resin needs to demonstrate a minimum of 50 percent retention of the relevant mechanical property compared to the same resin in unexposed condition. In addition, the exposed resin needs to demonstrate an increased retention of the relevant mechanical property of at least 20 percentage points when compared to a similarly exposed general-purpose resin. For example, if the general-purpose resin retains 45 percent of the relevant property when tested as specified above, then a corrosion-resistant resin needs to retain at least 65 percent (45 percent plus 20 percent) of its property. The general-purpose resin used in the test needs to have an average molecular weight of greater than 1,000, be formulated with a 1:2 ratio of maleic anhydride to phthalic anhydride and 100 percent diethylene glycol, and a styrene content between 43 to 48 percent; or

(2) Complies with industry standards that require specific exposure testing to corrosive media, such as UL 1316, UL 1746, or ASTM F-1216.

Doctor box means the box or trough on an SMC machine into which the liquid resin paste is delivered before it is metered onto the carrier film.

Filament application means an open molding process for fabricating composites in which reinforcements are fed through a resin bath and wound onto a rotating mandrel. The materials on the mandrel may be rolled out or worked by using nonmechanical tools prior to curing. Resin application to the reinforcement on the mandrel by means other than the resin bath, such as spray guns, pressure-fed rollers, flow coaters, or brushes is not considered filament application.

Filled Resin means that fillers have been added to a resin such that the amount of inert substances is at least 10 percent by weight of the total resin plus filler mixture. Filler putty made from a resin is considered a filled resin.

Fillers means inert substances dispersed throughout a resin, such as calcium carbonate, alumina trihydrate, hydrous aluminum silicate, mica, feldspar, wollastonite, silica, and talc. Materials that are not considered to be fillers are glass fibers or any type of reinforcement and microspheres.

Fire retardant gel coat means a gel coat used for products for which low-flame spread/low-smoke resin is used.

Fluid impingement technology means a spray gun that produces an expanding non-misting curtain of liquid by the impingement of low-pressure uninterrupted liquid streams.

Food contact industry standard means a standard related to food contact application contained in Food and Drug Administration's regulations at 21 CFR 177.2420.

Gel Coat means a quick-setting resin used to improve surface appearance and/or performance of composites. It can be used to form the surface layer of any composites other than those used for molds in tooling operations.

Gel coat application means a process where either clear production, pigmented production, white/off-white or tooling gel coat is applied.

HAP-containing materials storage means an ancillary process which involves keeping HAP-containing materials, such as resins, gel coats, catalysts, monomers, and cleaners, in containers or bulk storage tanks for any length of time. Containers may include small tanks, totes, vessels, and buckets.

High Performance gel coat means a gel coat used on products for which National Science Foundation, United States Department of Agriculture, ASTM, durability, or other property testing is required.

High strength gel coat means a gel coat applied to a product that requires high strength resin.

High strength resins means polyester resins which have a casting tensile strength of 10,000 pounds per square inch or more and which are used for manufacturing products that have high strength requirements

such as structural members and utility poles.

Injection molding means a closed molding process for fabricating composites in which composite materials are injected under pressure into a heated mold cavity that represents the exact shape of the product. The composite materials are cured in the heated mold cavity.

Low Flame Spread/Low Smoke Products means products that meet the following requirements. The products must meet both the applicable flame spread requirements and the applicable smoke requirements. Interior or exterior building application products must meet an ASTM E-84 Flame Spread Index of less than or equal to 25, and Smoke Developed Index of less than or equal to 450, or pass National Fire Protection Association 286 Room Corner Burn Test with no flash over and total smoke released not exceeding 1000 meters square. Mass transit application products must meet an ASTM E-162 Flame Spread Index of less than or equal to 35 and ASTM E662 Smoke Density $D_s @ 1.5$ minutes less than or equal to 100 and $D_s @ 4$ minutes less than or equal to 200. Duct application products must meet ASTM E084 Flame Spread Index less than or equal to 25 and Smoke Developed Index less than or equal to 50 on the interior and/or exterior of the duct.

Manual resin application means an open molding process for fabricating composites in which composite materials are applied to the mold by pouring or by using hands and nonmechanical tools, such as brushes and rollers. Materials are rolled out or worked by using nonmechanical tools prior to curing. The use of pressure-fed rollers and flow coaters to apply resin is not considered manual resin application.

Mechanical resin application means an open molding process for fabricating composites in which composite materials (except gel coat) are applied to the mold by using mechanical tools such as spray guns, pressure-fed rollers, and flow coaters. Materials are rolled out or worked by using nonmechanical tools prior to curing.

Mixing means the blending or agitation of any HAP containing materials in vessels that are 5.00 gallons (18.9 liters) or larger. Mixing may involve the blending of resin, gel coat, filler, reinforcement, pigments, catalysts, monomers, and any other additives.

Mold means a cavity or matrix into or onto which the composite materials are placed and from which the product takes its form.

Neat gel coat means the resin as purchased for the supplier, but not including any inert fillers.

Neat gel coat plus means neat gel coat plus any organic HAP-containing materials that are added to the gel coat by the supplier or the facility, excluding catalysts and promoters. Neat gel coat plus does include any additions of styrene or methyl methacrylate monomer in any form, including in catalysts and promoters.

Neat resin means the resin as purchased from the supplier, but not including any inert fillers.

Neat resin plus means neat resin plus any organic HAP containing materials that are added to the resin by the supplier or the facility. Neat resin plus does not include any added filler, reinforcements, catalysts, or promoters. Neat resin does include any additions of styrene or methyl methacrylate monomer in any form, including in catalysts and promoters.

Nonatomized mechanical application means the use of application tools other than brushes to apply resin and gel coat where the application tool has documentation provided by its manufacturer or user that this design of the application tool has been organic HAP emissions tested, and the test results showed that use of this application tool results in organic HAP emissions that are no greater than the organic HAP emissions predicted by the applicable nonatomized application equation(s) in Table 1 to this subpart. In addition, the device must be operated according to the manufacturer's directions, including instructions to prevent the operation of the device at excessive spray pressures. Examples of nonatomized application include flow coaters, pressure fed rollers, and fluid impingement spray guns.

Noncorrosion-resistant resin means any resin other than a corrosion-resistant resin or a tooling resin.

Noncorrosion-resistant product means any product other than a corrosion-resistant product or a mold.

Non-routine manufacture means that you manufacture parts to replace worn or damaged parts of a reinforced plastic composites product, or a product containing reinforced plastic composite parts, that was originally manufactured in another facility. For a part to qualify as non-routine manufacture, it must be used for repair or replacement, and the manufacturing schedule must be based on the current or anticipated repair needs of the reinforced plastic composites product, or a product containing reinforced plastic composite parts.

Operation means a specific process typically found at a reinforced plastic composites facility. Examples of operations are noncorrosion-resistant manual resin application, corrosion-resistant mechanical resin application, pigmented gel coat application, mixing and HAP containing materials storage.

Operation group means a grouping of individual operations based primarily on mold type. Examples are open molding, closed molding, and centrifugal casting.

Open molding means a process for fabricating composites in a way that HAP-containing materials are exposed to the atmosphere. Open molding includes processes such as manual resin application, mechanical resin application, filament application, and gel coat application. Open molding also includes application of resins and gel coats to parts that have been removed from the open mold.

Pigmented gel coat means a gel coat that has a color, but does not contain 10 percent or more titanium dioxide by weight. It can be used to form the surface layer of any composites other than those used for molds in tooling operations.

Polymer casting means a process for fabricating composites in which composite materials are ejected from a casting machine or poured into an open, partially open, or closed mold and cured. After the composite materials are poured into the mold, they are not rolled out or worked while the mold is open. The composite materials may or may not include reinforcements. Products produced by the polymer casting process include cultured marble products and polymer concrete.

Preform Injection means a form of pultrusion where liquid resin is injected to saturate reinforcements in an

enclosed system containing one or more chambers with openings only large enough to admit reinforcements. Resin, which drips out of the chamber(s) during the process, is collected in closed piping or covered troughs and then into a covered reservoir for recycle. Resin storage vessels, reservoirs, transfer systems, and collection systems are covered or shielded from the ambient air. Preform injection differs from direct die injection in that the injection chambers are not directly attached to the die.

Prepreg materials means reinforcing fabric received precoated with resin which is usually cured through the addition of heat.

Pultrusion means a continuous process for manufacturing composites that have a uniform cross-sectional shape. The process consists of pulling a fiber-reinforcing material through a resin impregnation chamber or bath and through a shaping die, where the resin is subsequently cured. There are several types of pultrusion equipment, such as open bath, resin injection, and direct die injection equipment.

Repair means application of resin or gel coat to a part to correct a defect, where the resin or gel coat application occurs after the part has gone through all the steps of its typical production process, or the application occurs outside the normal production area. For purposes of this subpart, rerouting a part back through the normal production line, or part of the normal production line, is not considered repair.

Resin transfer molding means a process for manufacturing composites whereby catalyzed resin is transferred or injected into a closed mold in which fiberglass reinforcement has been placed.

Sheet molding compound (SMC) means a ready-to-mold putty-like molding compound that contains resin(s) processed into sheet form. The molding compound is sandwiched between a top and a bottom film. In addition to resin(s), it may also contain catalysts, fillers, chemical thickeners, mold release agents, reinforcements, and other ingredients. Sheet molding compound can be used in compression molding to manufacture reinforced plastic composites products.

Shrinkage controlled resin means a resin that when promoted, catalyzed, and filled according to the resin manufacturer's recommendations demonstrates less than 0.3 percent linear shrinkage when tested according to ASTM D2566.

SMC manufacturing means a process which involves the preparation of SMC.

Tooling gel coat means a gel coat that is used to form the surface layer of molds. Tooling gel coats generally have high heat distortion temperatures, low shrinkage, high barcol hardness, and high dimensional stability.

Tooling resin means a resin that is used to produce molds. Tooling resins generally have high heat distortion temperatures, low shrinkage, high barcol hardness, and high dimensional stability.

Uncontrolled oven organic HAP emissions means those organic HAP emissions emitted from the oven through closed vent systems to the atmosphere and not to a control device. These organic HAP emissions do not include organic HAP emissions that may escape into the workplace through the opening of panels or doors on the ovens or other similar fugitive organic HAP emissions in the workplace.

Uncontrolled wet-out area organic HAP emissions means any or all of the following: organic HAP emissions from wet-out areas that do not have any capture and control, organic HAP emissions that escape from wet-out area enclosures, and organic HAP emissions from wet-out areas that are captured by an enclosure but are vented to the atmosphere and not to an add-on control device.

Unfilled means that there has been no addition of fillers to a resin or that less than 10 percent of fillers by weight of the total resin plus filler mixture has been added.

Vapor suppressant means an additive, typically a wax, that migrates to the surface of the resin during curing and forms a barrier to seal in the styrene and reduce styrene emissions.

Vapor-suppressed resin means a resin containing a vapor suppressant added for the purpose of reducing styrene emissions during curing.

White and off-white gel coat means a gel coat that contains 10 percent of more titanium dioxide by weight.

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b State Only Enforceable Section

1. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements (as defined in OAC rule 3745-77-01(H)) or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

Z033 - laboratory;
 Z034 - Hastings plant heater;
 Z035 - Trane office heater;
 Z036 - resin room heater;
 Z037 - manufacturing office heater; and
 Z038 - link building heater.

2. This permit allows the use of resin batch, process, and cleanup materials specified by the permittee in the application for PTI number 16-980. The daily, facility-wide emission limitations specified in this permit were established in accordance with the Ohio EPA's "Air Toxics Policy" and are based on the resin batch, process, and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application.

Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated, after stack height modifications, for each pollutant based on the Screen 3 model and a comparison of the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). In accordance with

Ohio EPA's "Air Toxics Policy", the stack heights for vents PVF5, PVF8, PVF11, and PVF12 shall be increased to 1.5 times building height (i.e., 30 ft).

3. The following establishes daily, facility-wide allowable emissions and summarizes the results of the modeling for each pollutant:

Pollutant Allowable Emissions (lbs/day)

methylene chloride 260
styrene 520
trimethylbenzene 60

- a. Pollutant - methylene chloride

TLV (mg/m3): 174

Maximum Hourly Emission Rate (pounds/hour): 16.5

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 3,851

MAGLC (ug/m3): 4,143

- b. Pollutant - styrene

TLV (mg/m3): 85.2

Maximum Hourly Emission Rate (pounds/hour): 21.6

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 1,647

MAGLC (ug/m3): 2,029

- c. Pollutant - trimethylbenzene

TLV (mg/m3): 123

Maximum Hourly Emission Rate (pounds/hour): 2.7

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 620

MAGLC (ug/m3): 2,929

4. Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the Akron RAQMD are required, including the possible issuance of a modification to the operating permit or the requirement to obtain a new permit to install:

a. any changes in the composition of the resin batch, process, or cleanup materials, or the use of new coatings or cleanup materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists" (ACGIH), than the lowest TLV value specified in the above table;

b. any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table;

c. any change to the emissions unit or its method of operation that would either require an increase in the emission limitations established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01;

d. any change in the composition of the resin batches, processes, or cleanup materials, or use of new resin batches, processes, or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)]; and

e. any change in the composition of the resin batches, processes, or cleanup materials, or use of new resin batches, processes, or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" as defined in OAC rule 3745-77-01(V).

5. Compliance with the daily emission limitations established under Ohio EPA's "Air Toxics Policy" shall be based upon a daily summation of emissions from all emissions units at the facility. Emissions from each pultrusion and fabrication machine shall be calculated using daily emission and material usage records. Emissions from the remaining emissions units shall be the average daily allowable values.

6. The permittee no longer employs methylene chloride and trimethylbenzene during the operation of these emissions units. Should the use of methylene chloride and trimethylbenzene be required in the future during the operation of these emissions units, the permittee shall apply for and obtain a new permit to install. Because the permittee no longer employs methylene chloride and trimethylbenzene, the associated record keeping and reporting requirements have been removed from this permit.

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: L001 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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Batch cold parts cleaner, Z027	OAC rule 3745-31-05(A)(3) (PTI 16-980)	20.0 lbs/day of VOC
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The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(O). See section A.I.2 below.

2. Additional Terms and Conditions

- a. The permittee shall equip the cold cleaner with one of the following:

(a)

i. the cold cleaner shall be operated with a cover, and if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute, measured at 100 degrees Fahrenheit or, if the solvent is heated or agitated, the cover shall be designed and constructed so that it can be easily operated with one hand; or

ii. the cold cleaner shall employ a remote solvent reservoir from which solvent is pumped through a nozzle suspended over a sink-like work area which drains back to the reservoir, provided the sink-like work area has an open drain area of less than 16 square inches and provided the solvent neither is heated above 120 degrees Fahrenheit nor has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit.

- b. The cold cleaner shall be equipped with a device for draining the cleaned parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit, the drainage facility shall be constructed internally so that parts are enclosed under the cover during draining, unless an internal type drainage device cannot fit into the cleaning system.
- c. The permittee shall install one of the following devices if the solvent vapor pressure is greater than 0.6 pound per square inch absolute measured at 100 degrees Fahrenheit, or if the solvent is heated above 120 degrees Fahrenheit:
 - i. freeboard that gives a freeboard ratio greater than or equal to 0.7;
 - ii. water cover (solvent must be insoluble in and heavier than water); or
 - iii. other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Director.

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II. Operational Restrictions

1. The cold cleaner shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:
 - a. provide a permanent, legible, conspicuous label, summarizing the operating requirements;
 - b. store waste solvent in covered containers;
 - c. close the cover whenever parts are not being handled in the cleaner;
 - d. drain the cleaned parts until dripping ceases;
 - e. if used, supply a solvent spray that is a solid fluid stream (not a fine, atomized, or shower-type spray) at a pressure that does not exceed 10 pounds per square inch gauge; and
 - f. clean only materials that are neither porous nor absorbent.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records, that contain the following information:
 - a. the types of solvents employed;
 - b. the density of each solvent employed, in pounds per gallon;
 - c. the vapor pressure of each solvent, in pounds per square inch absolute, measured at one hundred degrees Fahrenheit;
 - d. the amounts of solvents employed and recycled per day, in gallons;
 - e. the number of hours per day that the emissions unit was in operation;
 - f. all control equipment maintenance; and
 - g. the calculated daily VOC emission rate, in pounds per day.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that provide an identification of each day during which the VOC emissions exceeded the daily mass emission limitation of 20.0 lbs/day, and the actual VOC emissions for each such day.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
2. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
 - a. Emission Limitation:

20.0 lbs/day of VOC

Applicable Compliance Method:

Multiply the difference of the amount of solvent employed, in gallons per day, and the amount of solvent recycled, in gallons per day, by the density of the solvent, in pounds per gallon.

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

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: L001 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Issuance type: Title V Final Permit

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Facility ID: 1667020035 Emissions Unit ID: L002 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Batch cold parts cleaner, Z028	OAC rule 3745-31-05(A)(3) (PTI 16-980)	20.0 lbs/day of VOC
	OAC rule 3745-21-09(O)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(O). See section A.I.2 below.

2. **Additional Terms and Conditions**

- a. The permittee shall equip the cold cleaner with one of the following:
 - (a)
 - i. the cold cleaner shall be operated with a cover, and if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute, measured at 100 degrees Fahrenheit or, if the solvent is heated or agitated, the cover shall be designed and constructed so that it can be easily operated with one hand; or
 - ii. the cold cleaner shall employ a remote solvent reservoir from which solvent is pumped through a nozzle suspended over a sink-like work area which drains back to the reservoir, provided the sink-like work area has an open drain area of less than 16 square inches and provided the solvent neither is heated above 120 degrees Fahrenheit nor has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit.
 - b. The cold cleaner shall be equipped with a device for draining the cleaned parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit, the drainage facility shall be constructed internally so that parts are enclosed under the cover during draining, unless an internal type drainage device cannot fit into the cleaning system.
 - c. The permittee shall install one of the following devices if the solvent vapor pressure is greater than 0.6 pound per square inch absolute measured at 100 degrees Fahrenheit, or if the solvent is heated above 120 degrees Fahrenheit:
 - i. freeboard that gives a freeboard ratio greater than or equal to 0.7;
 - ii. water cover (solvent must be insoluble in and heavier than water); or
 - iii. other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Director.

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II. **Operational Restrictions**

- 1. The cold cleaner shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:

- a. provide a permanent, legible, conspicuous label, summarizing the operating requirements;
- b. store waste solvent in covered containers;
- c. close the cover whenever parts are not being handled in the cleaner;
- d. drain the cleaned parts until dripping ceases;
- e. if used, supply a solvent spray that is a solid fluid stream (not a fine, atomized, or shower-type spray) at a pressure that does not exceed 10 pounds per square inch gauge; and
- f. clean only materials that are neither porous nor absorbent.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records, that contain the following information:
 - a. the types of solvents employed;
 - b. the density of each solvent employed, in pounds per gallon;
 - c. the vapor pressure of each solvent, in pounds per square inch absolute, measured at one hundred degrees Fahrenheit;
 - d. the amounts of solvents employed and recycled per day, in gallons;
 - e. the number of hours per day that the emissions unit was in operation;
 - f. all control equipment maintenance; and
 - g. the calculated daily VOC emission rate, in pounds per day.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that provide an identification of each day during which the VOC emissions exceeded the daily mass emission limitation of 20.0 lbs/day, and the actual VOC emissions for each such day.
2. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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

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V. Testing Requirements

1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:
 - a. Emission Limitation:
20.0 lbs/day of VOC

Applicable Compliance Method:

Multiply the difference of the amount of solvent employed, in gallons per day, and the amount of solvent recycled, in gallons per day, by the density of the solvent, in pounds per gallon.

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

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1667020035 Emissions Unit ID: L002 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: L003 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Batch cold parts cleaner, Z029	OAC rule 3745-31-05(A)(3) (PTI 16-980)	20.0 lbs/day of VOC
	OAC rule 3745-21-09(O)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(O). See section A.I.2 below.

2. Additional Terms and Conditions

- a. The permittee shall equip the cold cleaner with one of the following:
 - (a)
 - i. the cold cleaner shall be operated with a cover, and if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute, measured at 100 degrees Fahrenheit or, if the solvent is heated or agitated, the cover shall be designed and constructed so that it can be easily operated with one hand; or
 - ii. the cold cleaner shall employ a remote solvent reservoir from which solvent is pumped through a nozzle suspended over a sink-like work area which drains back to the reservoir, provided the sink-like work area has an open drain area of less than 16 square inches and provided the solvent neither is heated above 120 degrees Fahrenheit nor has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit.
 - b. The cold cleaner shall be equipped with a device for draining the cleaned parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit, the drainage facility shall be constructed internally so that parts are enclosed under the cover during draining, unless an internal type drainage device cannot fit into the cleaning system.
 - c. The permittee shall install one of the following devices if the solvent vapor pressure is greater than 0.6 pound per square inch absolute measured at 100 degrees Fahrenheit, or if the solvent is heated above 120 degrees Fahrenheit:
 - i. freeboard that gives a freeboard ratio greater than or equal to 0.7;
 - ii. water cover (solvent must be insoluble in and heavier than water); or
 - iii. other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Director.

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II. Operational Restrictions

1. The cold cleaner shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:
 - a. provide a permanent, legible, conspicuous label, summarizing the operating requirements;
 - b. store waste solvent in covered containers;
 - c. close the cover whenever parts are not being handled in the cleaner;
 - d. drain the cleaned parts until dripping ceases;
 - e. if used, supply a solvent spray that is a solid fluid stream (not a fine, atomized, or shower-type spray) at a pressure that does not exceed 10 pounds per square inch gauge; and
 - f. clean only materials that are neither porous nor absorbent.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records, that contain the following information:

- a. the types of solvents employed;
- b. the density of each solvent employed, in pounds per gallon;
- c. the vapor pressure of each solvent, in pounds per square inch absolute, measured at one hundred degrees Fahrenheit;
- d. the amounts of solvents employed and recycled per day, in gallons;
- e. the number of hours per day that the emissions unit was in operation;
- f. all control equipment maintenance; and
- g. the calculated daily VOC emission rate, in pounds per day.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that provide an identification of each day during which the VOC emissions exceeded the daily mass emission limitation of 20.0 lbs/day, and the actual VOC emissions for each such day.

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

2. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitation in section A.1.1 of these terms and conditions shall be determined in accordance with the following method:

- a. Emission Limitation:

20.0 lbs/day of VOC

Applicable Compliance Method:

Multiply the difference of the amount of solvent employed, in gallons per day, and the amount of solvent recycled, in gallons per day, by the density of the solvent, in pounds per gallon.

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

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1667020035 Emissions Unit ID: L003 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the

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

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

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1667020035 Emissions Unit ID: P901 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z001	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions

*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions

OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
OAC rule 3745-17-08(B)	See section A.I.2.a below.
OAC rule 3745-17-11(B)	See section A.I.2.b below.
OAC rule 3745-21-07(G)	See section A.I.2.b below.
40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.

The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.

The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

- 1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaiking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

- 2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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

IV. **Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.
(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P901 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

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

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

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

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Issuance type: Title V Final Permit

Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P902 Issuance type: Title V Final Permit

A. **State and Federally Enforceable Section**

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z002	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.b below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. **Additional Terms and Conditions**

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. **Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P902 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P903 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z003	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.b below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. **Additional Terms and Conditions**

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. **Operational Restrictions**

- 1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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

- 1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

- 2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:

- i. organic material;
- ii. volatile organic compounds; and
- iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. **Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P903 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P904 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z004	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions
		*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
OAC rule 3745-17-11(B)	See section A.I.2.b below.	
OAC rule 3745-21-07(G)	See section A.I.2.b below.	
40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.	

The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.

The compliance date for this rule is April 21, 2006.

- 2. **Additional Terms and Conditions**

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.(Authority for term: OAC rule 3745-77-07(C)(1))
 - b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P904 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P905 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z005	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G) 40 CFR Part 63, Subpart WWWW	See section A.I.2.b below. Reduce total HAP emissions by at least 60 weight percent.
		The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;

- b. styrene content (% by weight) of each batch;
- c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
- d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
- e. production hours; and
- f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

- b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total

organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P905 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

1. None

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P906 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z006	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions
		*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.

OAC rule 3745-17-11(B)	See section A.I.2.b below.
OAC rule 3745-21-07(G)	See section A.I.2.b below.
40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.
	The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.
	The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaiking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0

pounds per hour, and the actual average hourly organic material emissions for each such day; and

b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P906 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Issuance type: Title V Final Permit

Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P907 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z007	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G) 40 CFR Part 63, Subpart WWWW	See section A.I.2.b below. Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P907 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the

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

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

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1667020035 Emissions Unit ID: P908 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z008	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions

*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions

OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
OAC rule 3745-17-08(B)	See section A.I.2.a below.
OAC rule 3745-17-11(B)	See section A.I.2.b below.
OAC rule 3745-21-07(G)	See section A.I.2.b below.
40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.

The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.

The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

- 1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaiking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

- 2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. **Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.
(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P908 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

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

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

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

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P909 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z009	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.b below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. **Additional Terms and Conditions**

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. **Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P909 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P910 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z010	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.b below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. **Additional Terms and Conditions**

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. **Operational Restrictions**

- 1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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

- 1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

- 2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:

- i. organic material;
- ii. volatile organic compounds; and
- iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. **Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

- b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

- c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P910 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P911 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z011	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions
		*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.b below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.

The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.

The compliance date for this rule is April 21, 2006.

- 2. **Additional Terms and Conditions**

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.(Authority for term: OAC rule 3745-77-07(C)(1))
 - b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P911 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

- 1. None

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 1667020035 Issuance type: Title V Final Permit

Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P912 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z012	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.b below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;

- b. styrene content (% by weight) of each batch;
- c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
- d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
- e. production hours; and
- f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

- b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total

organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P912 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

1. None

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P913 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z013	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions
		*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.

OAC rule 3745-17-11(B)	See section A.I.2.b below.
OAC rule 3745-21-07(G)	See section A.I.2.b below.
40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.
	The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.
	The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaiking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0

pounds per hour, and the actual average hourly organic material emissions for each such day; and

b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P913 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

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

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

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

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P914 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z014	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G) 40 CFR Part 63, Subpart WWWW	See section A.I.2.b below. Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter deaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P914 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the

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

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

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P915 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z015	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions

*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions

OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
OAC rule 3745-17-08(B)	See section A.I.2.a below.
OAC rule 3745-17-11(B)	See section A.I.2.b below.
OAC rule 3745-21-07(G)	See section A.I.2.b below.
40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.

The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.

The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

- 1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaiking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

- 2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. **Reporting Requirements**

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.
(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P915 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

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

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

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

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P917 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Thermwood fabrication machines (2), Z030	OAC rule 3745-31-05(A)(3) (PTI 16-980)	20.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions See section A.I.2.a below. *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.b below.
	OAC rule 3745-17-11(B)	See section A.I.2.c below.
	OAC rule 3745-21-07(G)	See section A.I.2.c below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. **Additional Terms and Conditions**

- a. The permittee shall not employ any photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit.
- b. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- c. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter deaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - b. production hours; and
 - c. daily (pounds) and average hourly emissions (pounds/hour) resulting from wiping solvents and organic material cleaning liquids for the following pollutants:
 - i. organic material; and
 - ii. volatile organic compounds.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the organic material emissions exceeded 20.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

20.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total

organic material content of each resin batch and cleanup material.

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

b. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

c. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

d. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Issuance type: Title V Final Permit

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Facility ID: 1667020035 Emissions Unit ID: P917 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Issuance type: Title V Final Permit

Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P918 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Still fabrication machines, Z031	OAC rule 3745-31-05(A)(3) (PTI 16-980)	20.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions

See section A.I.2.a below.

*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW.

OAC rule 3745-17-07(A)

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

OAC rule 3745-17-07(B)

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

OAC rule 3745-17-08(B)	See section A.I.2.b below.
OAC rule 3745-17-11(B)	See section A.I.2.c below.
OAC rule 3745-21-07(G)	See section A.I.2.c below.
40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.

The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.

The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall not employ any photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit.
- b. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- c. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - b. production hours; and
 - c. daily (pounds) and average hourly emissions (pounds/hour) resulting from wiping solvents and organic material cleaning liquids for the following pollutants:
 - i. organic material; and
 - ii. volatile organic compounds.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the organic material emissions exceeded 20.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

20.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

- b. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

- c. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

- d. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P918 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P919 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Fabrication machines, Z032	OAC rule 3745-31-05(A)(3) (PTI 16-980)	20.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions See section A.I.2.a below. *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.b below.
	OAC rule 3745-17-11(B)	See section A.I.2.c below.
	OAC rule 3745-21-07(G)	See section A.I.2.c below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall not employ any photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit.
- b. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- c. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

- 1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaiking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

- 2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - b. production hours; and
 - c. daily (pounds) and average hourly emissions (pounds/hour) resulting from wiping solvents and organic material cleaning liquids for the following pollutants:

- i. organic material; and
- ii. volatile organic compounds.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of each day during which the organic material emissions exceeded 20.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.ii.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

20.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

- b. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

- c. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

- d. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P919 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

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

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

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

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P922 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z016	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.b below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P922 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Issuance type: Title V Final Permit

Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P923 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z017	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions

*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions

	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW.
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
OAC rule 3745-17-08(B)	See section A.I.2.a below.
OAC rule 3745-17-11(B)	See section A.I.2.b below.
OAC rule 3745-21-07(G)	See section A.I.2.b below.
40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.

The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.

The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

- 1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

- 2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.
(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance

with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P923 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P924 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z018	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions
		*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
OAC rule 3745-21-07(G)	See section A.I.2.b below.	
40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.	
	The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.	
	The compliance date for this rule is April 21, 2006.	

2. **Additional Terms and Conditions**

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. **Operational Restrictions**

- 1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while

the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:
 - 8.0 lbs/hr total organic materialsApplicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P924 Issuance type: Title V Final Permit

B. State Enforceable Section

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

state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. None

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IV. Reporting Requirements

1. None

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V. Testing Requirements

1. None

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VI. Miscellaneous Requirements

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P925 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z019	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.b below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent. The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. **Additional Terms and Conditions**

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. **Operational Restrictions**

- 1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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

- 1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

- 2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;

- ii. volatile organic compounds; and
- iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

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

- a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and

- b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

- b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

- c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P925 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1667020035 Emissions Unit ID: P926 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z020	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions
		*as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.b below.
	40 CFR Part 63, Subpart WWWW	Reduce total HAP emissions by at least 60 weight percent.

The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.

The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate

emissions at the point(s) of capture to the extent possible with good engineering design.

- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P926 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

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II. Operational Restrictions

- 1. None

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III. Monitoring and/or Record Keeping Requirements

- 1. None

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IV. Reporting Requirements

- 1. None

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V. Testing Requirements

- 1. None

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P927 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z021	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G) 40 CFR Part 63, Subpart WWWW	See section A.I.2.b below. Reduce total HAP emissions by at least 60 weight percent.
		The Subpart WWWW requirements are included in Part II, sections A.6 through A.43. The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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

II. Operational Restrictions

- 1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

- 2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;

- c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
- d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
- e. production hours; and
- f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day, and the actual organic material emissions for each such day.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. Testing Requirements

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

(Authority for term: OAC rule 3745-77-07(C)(1))
 - b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

- c. Emission Limitation:
 0.2 lb/hr particulate emissions
 Applicable Compliance Method:
 If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.
 (Authority for term: OAC rule 3745-77-07(C)(1))

- d. Emission Limitation:
 Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
 Applicable Compliance Method:
 Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).
 (Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1))

- e. Emission Limitation:
 Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
 Applicable Compliance Method:
 Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).
 (Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P927 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

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

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

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

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: P928 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pultrusion process production unit Z022	OAC rule 3745-31-05(A)(3) (PTI 16-980)	8.0 lbs/hr total organic materials* 40.0 lbs/day total organic materials* 0.2 lb/hr particulate emissions *as defined under OAC rule 3745-21-01 -- also includes cleanup emissions
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-07(B), and 3745-17-08(B), and 40 CFR Part 63, Subpart WWW. Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-11(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.b below.

40 CFR Part 63, Subpart WWWW Reduce total HAP emissions by at least 60 weight percent.

The Subpart WWWW requirements are included in Part II, sections A.6 through A.43.

The compliance date for this rule is April 21, 2006.

2. Additional Terms and Conditions

- a. The permittee shall operate and maintain hoods, fans, and other equipment to adequately enclose, contain, capture, vent, and control emissions so as to minimize or eliminate visible particulate emissions at the point(s) of capture to the extent possible with good engineering design.
- b. The emission limitation(s) or control requirement(s) specified by this rule is(are) equivalent to or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

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II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 5 inches of water while the emissions unit is in operation; except for the 5 to 7 minutes per hour that each cyclone is in its blow-back mode for the purpose of filter decaking. During this mode, venting of particulates to the outside of the equipment, or the facility, shall not occur.

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

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis; but not during the periods of the blow-back operation.

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

2. The permittee shall record the following information on a daily basis for the line:
 - a. identification and quantity (pounds) of each resin batch received for processing;
 - b. styrene content (% by weight) of each batch;
 - c. styrene emissions from each batch, i.e., (% styrene) x (batch weight) x (0.04, AP-42 emission factor);
 - d. identification and net usage (pounds emissions) of each wiping solvent and organic material cleaning liquid employed (net usage shall be the difference between quantities employed and any returned for disposal/recycling, including solids);
 - e. production hours; and
 - f. daily (pounds) and average hourly emissions (pounds/hour) resulting from resin batch processing, and cleanup materials for the following pollutants:
 - i. organic material;
 - ii. volatile organic compounds; and
 - iii. styrene.

These calculations shall be based upon a mass balance approach.

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

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IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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

2. The permittee shall submit quarterly deviation (excursion) reports that include the following information:
 - a. an identification of each day during which the average hourly organic material emissions exceeded 8.0 pounds per hour, and the actual average hourly organic material emissions for each such day; and
 - b. an identification of each day during which the organic material emissions exceeded 40.0 pounds per day,

and the actual organic material emissions for each such day.

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

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

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V. **Testing Requirements**

1. Compliance with the emission limitations in section A.1.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

8.0 lbs/hr total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average hourly total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 18, 25 or 25A, as appropriate.

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

b. Emission Limitation:

40.0 lbs/day total organic materials

Applicable Compliance Method:

Daily records shall be maintained of the total organic materials content of each resin batch and cleanup material employed, the daily usage of each resin batch and cleanup material employed, and the calculated average daily total organic material emission rate for all resin batches and cleanup materials employed based upon a mass balance approach. Formulation data shall be used to determine the total organic material content of each resin batch and cleanup material.

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

c. Emission Limitation:

0.2 lb/hr particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated by emission tests performed in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

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

d. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

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

e. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by visible particulate emission observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(3))

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: P928 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: T001 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Process resin storage tanks; atmospheric, Tank 1 - 3,500 gal, Tank 2 - 3,500 gal, Tank 3 - 5,000 gal, Tank 4 - 5,000 gal, formerly Z023	OAC rule 3745-31-05(A)(3) (PTI 16-980)	1.46 tpy of styrene
	OAC rule 3745-21-09(L)	See section A.I.2.a below.
		See section A.I.2.b below.

2. Additional Terms and Conditions

- a. The storage tanks shall be equipped with a submerged fill pipe.
- b. These storage tanks are exempt from the requirements of OAC rule 3745-21-09(L)(1) in accordance with the size exemption as specified in OAC rule 3745-21-09(L)(2)(a).

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II. Operational Restrictions

1. None

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III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records which include the following information for the storage tanks:
 - a. the type of resin stored in each tank;
 - b. the styrene content of the resin;
 - c. the organic material content of the resin;
 - d. the VOC content of the resin;
 - e. the throughput of resin for each tank, in gallons; and
 - f. the daily organic material, VOC, and styrene emission rates, in pounds per day.

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

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IV. Reporting Requirements

1. The permittee shall notify the Director (the Akron RAQMD) of all exceedances of the annual emission limitation for styrene. The notification shall include a copy of such record and shall be sent to the Director (the Akron RAQMD) within 45 days after the exceedance occurs.

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

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V. Testing Requirements

1. Compliance with the emission limitation in section A.1.1 of these terms and conditions shall be determined in accordance with the following method:
 - a. Emission Limitation:

1.46 tpy of styrene

Applicable Compliance Method:

Styrene emissions from each storage tank shall be determined using USEPA's "Tanks Program 3.1" based upon the maximum annual throughput of the resin through the tank.

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

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: T001 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: T002 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Process styrene storage tanks with a capacity of 2,500 gallons for each tank; atmospheric, outside, formerly Z024	OAC rule 3745-31-05(A)(3) (PTI 16-980)	1.46 tpy of styrene See section A.I.2.a below.
	OAC rule 3745-21-09(L)	See section A.I.2.b below.

2. **Additional Terms and Conditions**
 - a. The storage tanks shall be equipped with a submerged fill pipe.
 - b. These storage tanks are exempt from the requirements of OAC rule 3745-21-09(L)(1) in accordance with the size exemption as specified in OAC rule 3745-21-09(L)(2)(a).

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II. **Operational Restrictions**

1. None

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

1. The permittee shall maintain daily records which include the following information for the storage tanks:
 - a. the type of resin stored in each tank;
 - b. the styrene content of the resin;
 - c. the organic material content of the resin;
 - d. the VOC content of the resin;
 - e. the throughput of resin for each tank, in gallons; and
 - f. the daily organic material, VOC, and styrene emission rates, in pounds per day.

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

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IV. **Reporting Requirements**

1. The permittee shall notify the Director (the Akron RAQMD) of all exceedances of the annual emission limitation for styrene. The notification shall include a copy of such record and shall be sent to the Director (the Akron RAQMD) within 45 days after the exceedance occurs.

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

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V. **Testing Requirements**

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

a. Emission Limitation:

1.46 tpy of styrene

Applicable Compliance Method:

Styrene emissions from each storage tank shall be determined using USEPA's "Tanks Program 3.1" based upon the maximum annual throughput of the resin through the tank.

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

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1667020035 Emissions Unit ID: T002 Issuance type: Title V Final Permit

B. State Enforceable Section

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

1. None.

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

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

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

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: T003 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Polystyrene storage tanks with a capacity of 302 gallons for each tank; atmospheric, formerly Z025	OAC rule 3745-31-05(A)(3) (PTI 16-980)	1.46 tpy of styrene See section A.I.2.a below.
	OAC rule 3745-21-09(L)	See section A.I.2.b below.

2. Additional Terms and Conditions

- a. The storage tanks shall be equipped with a submerged fill pipe.
- b. These storage tanks are exempt from the requirements of OAC rule 3745-21-09(L)(1) in accordance with the size exemption as specified in OAC rule 3745-21-09(L)(2)(a).

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II. **Operational Restrictions**

- 1. None

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

- 1. The permittee shall maintain daily records which include the following information for the storage tanks:
 - a. the type of resin stored in each tank;
 - b. the styrene content of the resin;
 - c. the organic material content of the resin;

- d. the VOC content of the resin;
 - e. the throughput of resin for each tank, in gallons; and
 - f. the daily organic material, VOC, and styrene emission rates, in pounds per day.
- (Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

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IV. Reporting Requirements

- 1. The permittee shall notify the Director (the Akron RAQMD) of all exceedances of the annual emission limitation for styrene. The notification shall include a copy of such record and shall be sent to the Director (the Akron RAQMD) within 45 days after the exceedance occurs.

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

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V. Testing Requirements

- 1. Compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

- a. Emission Limitation:

1.46 tpy of styrene

Applicable Compliance Method:

Styrene emissions from each storage tank shall be determined using USEPA's "Tanks Program 3.1" based upon the maximum annual throughput of the resin through the tank.

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

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VI. Miscellaneous Requirements

- 1. None

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Facility ID: 1667020035 Emissions Unit ID: T003 Issuance type: Title V Final Permit

B. State Enforceable Section

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

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

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

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None