



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-22246

Fac ID: 0204020069

DATE: 12/26/2006

CW Ohio Inc
Pat Davin
1209 Maple St
Conneaut, OH 44030-2120

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

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

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

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

Sincerely,

Michael W. Ahern

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

CC: USEPA

NEDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

FINAL PERMIT TO INSTALL 02-22246

Application Number: 02-22246
Facility ID: 0204020069
Permit Fee: **\$400**
Name of Facility: CW Ohio Inc
Person to Contact: Pat Davin
Address: 1209 Maple St
Conneaut, OH 44030-2120

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1209 Maple St
Conneaut, Ohio**

Description of proposed emissions unit(s):
Two pultrusion units.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Part I - GENERAL TERMS AND CONDITIONS

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

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to

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the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. Scheduled Maintenance/Malfunction Reporting

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

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

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

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7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

- iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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

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12. Air Pollution Nuisance

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

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13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

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

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder.

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The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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4. Authorization To Install or Modify

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

5. Construction of New Sources(s)

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

6. Public Disclosure

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

7. Applicability

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

8. Construction Compliance Certification

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If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

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

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

C. Permit-To-Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	14.6
PE	3.2

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

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

None

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

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

Operations, Property, and/or Equipment - (P042) - Pultrusion unit

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-21-07(G)(2)	The organic compound (OC) emissions shall not exceed: 8 lbs/hr and 40 lbs/day. See section A.I.2.a.
OAC rule 3745-31-02(A)(2)	The use of volatile organic compound (VOC) and/or hazardous air pollutant (HAP) containing cleanup materials are prohibited for this emissions unit. See section A.II.1.
40 CFR Part 63, Subpart WWWW	See sections A.II.2 and A.II.3.
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.
OAC rule 3745-17-11(B)	The particulate emissions (PE) shall not exceed 2.4 lbs/hr.
OAC rule 3745-31-02(A)(2)	PE shall be less than 10.0 tons/yr. See section A.I.2.b.

2. Additional Terms and Conditions

- 2.a The OC emissions from the pultrusion operations consist of styrene, which is a photochemically reactive material (PRM) as defined in OAC rule 3745-21-01(C)(5).
- 2.b Permit to Install 02-22246 for this air contaminant source takes into account the use of a fabric filter system, whenever this air contaminant source is in operation, with a minimum control efficiency of 90%, by weight for PE, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

Emissions Unit ID: P042

II. Operational Restrictions

1. The permittee shall use only non-VOC and non-HAP cleanup materials for this emissions unit.
2. The permittee shall install and operate a wet area enclosure with resin drip collection to reduce total organic HAP emissions by at least 60 weight percent, per the requirements contained in 63.5830 of 40 CFR Part 63, Subpart WWWW. These requirements for this pultrusion unit, with no pre-mold heat and no direct die injection, are as follows:
 - a. 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.
 - b. The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
 - c. The enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
 - d. The enclosure can only be constructed high enough to clear the highest part of the pultrusion line that must be inside the enclosure.
 - e. The total open area of the enclosure must not exceed 2 (two) times the cross sectional area of the puller window. All areas which are open need to be included in the total open area calculation with the exception of access panels, door and/or hatches that are part of the enclosure. The area which is displaced by entering reinforcement or exiting product is considered open. Areas covered by brush covers are considered closed.
 - f. Open areas for level control devices, monitoring devices, agitation shafts, and/or fill hoses must have no more than 1.0 inch clearance.
 - g. Any access panels, doors, and/or hatches that are part of the enclosure must close tightly to avoid vapor leakage. Damaged access panels, doors, and/or hatches that allow vapor leakage must be replaced.
 - h. The wet area enclosure shall not be removed from the pultrusion line and/or the access panels, doors, and/or hatches to the wet area enclosure must remain closed whenever resin is in the bath, except for the following periods of time:
 - i. 30 minutes per any 8-hour shift
 - ii. 45 minutes per any 12-hour shift.
 - iii. 90 minutes per any day, if the machine operates 24 hours in a day.

Emissions Unit ID: P042

- iv. 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.
 - v. The facility may average the times that access panels, doors, and/or hatches are open across all operating lines. In this case, the average must not exceed the times shown above. All lines included in the average must have operated the entire time period being averaged.
 - i. No fans, blowers, and/or air lines shall be allowed within the enclosure. The enclosure must not be ventilated.
 - j. Resin drip shall be captured within the enclosure and returned by gravity to the resin bath.
3. The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition or removal of materials.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain a weekly log of filter replacements and any maintenance of the fabric filter system.
2. The permittee shall properly operate the fabric filter system and check it at least once per day when the emissions unit is in operation. The permittee shall record each day all periods of time during which the fabric filter system was not in operation when the emissions unit was in operation.
3. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. the company identification for each resin mix employed;
 - b. the weight of each resin mix employed, in pounds;
 - c. the OC content of each resin mix employed, in percent by weight;
 - d. the total OC emission rate for all the resin mixes employed, in pounds per day, calculated by the following equation:

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

where:

$E(OC)$ = OC emissions, as from all resin mix operations, in pounds per day;

W_i = the weight of resin mix (i) employed, as specified in section A.III.3.b, in

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pounds per day;

OC_i = the OC content of resin mix (i), as specified in section A.III.3.c, in percent by weight;

$EF(OC_i)$ = the emissions factor (i):

i = 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88)); and

0.40 = a factor that accounts for the 60 weight percent reduction of OC by compliance with section A.II.3;

- e. the actual number of hours that the emissions unit was in operation; and
 - f. the average, hourly OC emission rate for all the resin mixes employed, i.e., (d)/(e), in pounds per hour (average).
4. The permittee shall collect and record the following information for each month for this emissions unit:
- a. the company identification for each cleanup material employed;
 - b. documentation on whether or not each cleanup material employed contains any VOC and/or HAP;
 - c. the volume of each cleanup material applied, in gallons;
 - d. the OC content of each cleanup material applied, in pounds per gallon;
 - e. the total OC emission rate for all the cleanup materials employed, in pounds per month, calculated by the following equation:

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

where:

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

V_i = the volume of cleanup material (i) applied, as specified in Section A.III.4.c, in gallons per month; and

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OC_i = the OC content of cleanup material (i), as specified in Section A.III.4.d, in pounds per gallon;

- f. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in section A.III.5; and
 - g. if a credit for recovered cleanup material is used, the volume of this material added to the recovery container, in gallons per month; and the adjusted volume of cleanup materials employed, calculate by subtracting the volume of the recovered cleanup material added to the recovery container, from the volume of the total cleanup material applied (section A.III.4.c), in gallons per month (adjusted).
5. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup materials, and the recovery container serving this emissions unit:
- a. the date the materials from the recovery container were shipped off site; and
 - b. the number of gallons or pounds of materials from the recovery container shipped off site.
6. The permittee shall perform inspections of this emissions unit in accordance with the following frequencies:
- a. Keep all containers that store HAP-containing materials closed or covered except during the addition or removal of materials.

Minimum inspection frequency: once per batch of resin mix processed
 - b. The wet area enclosure is in place when resin mix is present in the resin bath, as specified in section A.II.2.h.

Minimum inspection frequency: all times when resin mix is present in the resin bath

Emissions Unit ID: P042

The purpose of the inspections is to ensure that equipment standard(s) or work practice(s) to minimize OC emissions are employed. The inspections shall be performed during representative, normal operation conditions.

7. Except as otherwise provided in section A.II.2.h.iv for section A.III.6.b, the permittee shall maintain records of the following information:
 - a. the date and reason any required inspections were not performed in section A.III.6; and
 - b. the date and all times when the wet area enclosure's access panels, doors, hatches or covers were open causing the limit of two times the puller window area to be exceeded when there was resin present in the resin bath and the resin bath was not covered.

The purpose of the inspections is to ensure that the methods to reduce OC emissions are employed. The inspections shall be performed during representative, normal operation conditions.

8. The permittee shall maintain files of all information (including all reports and notifications) in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:
 - a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day;
 - b. an identification of each day during which the OC emissions from this emissions unit exceeded 40 pounds per day, and the actual OC emissions for each such day;
 - c. an identification of each day during which an inspection was not performed by the required frequency;
 - d. an identification of each month during which any cleanup material employed

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contained any VOC and/or HAP, and the actual VOC and/or HAP emissions for each such month; and

- e. an identification of the date and duration of time that the wet area enclosure was removed or the access panels, doors, and/or hatches was/were open such that the open area was greater than 2 times the puller window area when resin was present in the bath, for a any period of time exceeding 30 minutes per any 8-hours shift, 45 minutes per any 12-hour shift or 90 minutes per any day when the machine operates 24 hours in a day.
2. The permittee shall notify the Northeast District Office in writing of any daily record showing that the particulate control filter was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Northeast District Office within 30 days after the event occurs.
 3. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.

V. Testing Requirements

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

- a. Emission Limitation:

8 lbs/hr of OC

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation above may be based on the monitoring and record keeping requirements specified in section A.III.3 of this permit.

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

Emissions Unit ID: P042

b. Emission Limitation:

40 lbs/day of OC

Applicable Compliance Method:

Compliance with the daily allowable OC emission limitation above shall be based on the monitoring and record keeping requirements specified in section A.III.3 of this permit.

c. Emission Limitation:

2.4 lbs/hr of PE

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

d. Emission Limitation:

PE shall be less than 10.0 tons/yr.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual allowable PE limitation above by multiplying the maximum hourly controlled PE rate [(3.7 pounds/hr) x (1 - 0.9) = 0.37 lb/hr] by the maximum annual number of hours of operation (8760 hours/yr), and then dividing by 2000 lbs/ton.

e. Emission Limitation:

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

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Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

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B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P042) - Pultrusion unit

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

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

Operations, Property, and/or Equipment - (P043) - Pultrusion unit

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-21-07(G)(2)	The organic compound (OC) emissions shall not exceed: 8 lbs/hr and 40 lbs/day. See section A.I.2.a.
OAC rule 3745-31-02(A)(2)	The use of volatile organic compound (VOC) and/or hazardous air pollutant (HAP) containing cleanup materials are prohibited for this emissions unit. See section A.II.1.
40 CFR Part 63, Subpart WWWW	See sections A.II.2 and A.II.3.
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as specified by the rule.
OAC rule 3745-17-11(B)	The particulate emissions (PE) shall not exceed 2.4 lbs/hr.
OAC rule 3745-31-02(A)(2)	PE shall be less than 10.0 tons/yr. See section A.I.2.b.

2. Additional Terms and Conditions

- 2.a The OC emissions from the pultrusion operations consist of styrene, which is a photochemically reactive material (PRM) as defined in OAC rule 3745-21-01(C)(5).
- 2.b Permit to Install 02-22246 for this air contaminant source takes into account the

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use of a fabric filter system, whenever this air contaminant source is in operation, with a minimum control efficiency of 90%, by weight for PE, as a voluntary restriction as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall use only non-VOC and non-HAP cleanup materials for this emissions unit.
2. The permittee shall install and operate a wet area enclosure with resin drip collection to reduce total organic HAP emissions by at least 60 weight percent, per the requirements contained in 63.5830 of 40 CFR Part 63, Subpart WWWW. These requirements for this pultrusion unit, with no pre-mold heat and no direct die injection, are as follows:
 - a. 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.
 - b. The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
 - c. The enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
 - d. The enclosure can only be constructed high enough to clear the highest part of the pultrusion line that must be inside the enclosure.
 - e. The total open area of the enclosure must not exceed 2 (two) times the cross sectional area of the puller window. All areas which are open need to be included in the total open area calculation with the exception of access panels, door and/or hatches that are part of the enclosure. The area which is displaced by entering reinforcement or exiting product is considered open. Areas covered by brush covers are considered closed.
 - f. Open areas for level control devices, monitoring devices, agitation shafts, and/or fill hoses must have no more than 1.0 inch clearance.
 - g. Any access panels, doors, and/or hatches that are part of the enclosure must close tightly to avoid vapor leakage. Damaged access panels, doors, and/or hatches that allow vapor leakage must be replaced.
 - h. The wet area enclosure shall not be removed from the pultrusion line and/or the access panels, doors, and/or hatches to the wet area enclosure must remain closed whenever resin is in the bath, except for the following periods of time:

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- i. 30 minutes per any 8-hour shift
 - ii. 45 minutes per any 12-hour shift.
 - iii. 90 minutes per any day, if the machine operates 24 hours in a day.
 - iv. 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.
 - v. The facility may average the times that access panels, doors, and/or hatches are open across all operating lines. In this case, the average must not exceed the times shown above. All lines included in the average must have operated the entire time period being averaged.
- i. No fans, blowers, and/or air lines shall be allowed within the enclosure. The enclosure must not be ventilated.
 - j. Resin drip shall be captured within the enclosure and returned by gravity to the resin bath.
3. The permittee shall keep all containers that store HAP-containing materials closed or covered, except during the addition or removal of materials.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain a weekly log of filter replacements and any maintenance of the fabric filter system.
2. The permittee shall properly operate the fabric filter system and check it at least once per day when the emissions unit is in operation. The permittee shall record each day all periods of time during which the fabric filter system was not in operation when the emissions unit was in operation.
3. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. the company identification for each resin mix employed;
 - b. the weight of each resin mix employed, in pounds;

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- c. the OC content of each resin mix employed, in percent by weight;
- d. the total OC emission rate for all the resin mixes employed, in pounds per day, calculated by the following equation:

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

where:

$E(OC)$ = OC emissions, as from all resin mix operations, in pounds per day;

W_i = the weight of resin mix (i) employed, as specified in section A.III.3.b, in pounds per day;

OC_i = the OC content of resin mix (i), as specified in section A.III.3.c, in percent by weight;

$EF(OC_i)$ = the emissions factor (i):

i = 4% or 0.04 (AP-42 Chapter 4.12, Table 4.12-2 (9/88)); and

0.40 = a factor that accounts for the 60 weight percent reduction of OC by compliance with section A.II.3;

- e. the actual number of hours that the emissions unit was in operation; and
 - f. the average, hourly OC emission rate for all the resin mixes employed, i.e., (d)/(e), in pounds per hour (average).
4. The permittee shall collect and record the following information for each month for this emissions unit:
- a. the company identification for each cleanup material employed;
 - b. documentation on whether or not each cleanup material employed contains any VOC and/or HAP;
 - c. the volume of each cleanup material applied, in gallons;
 - d. the OC content of each cleanup material applied, in pounds per gallon;
 - e. the total OC emission rate for all the cleanup materials employed, in pounds per month, calculated by the following equation:

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

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where:

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

V_i = the volume of cleanup material (i) applied, as specified in section A.III.4.c, in gallons per month; and

OC_i = the OC content of cleanup material (i), as specified in section A.III.4.d, in pounds per gallon;

- f. if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports, records of the total amount (gallons) of cleanup and purge material collected and added to the recovery container, for recycle, recovery, and/or disposal at an outside facility, shall be maintained as required in section A.III.5; and
 - g. if a credit for recovered cleanup material is used, the volume of this material added to the recovery container, in gallons per month; and the adjusted volume of cleanup materials employed, calculate by subtracting the volume of the recovered cleanup material added to the recovery container, from the volume of the total cleanup material applied (section A.III.4.c), in gallons per month (adjusted).
5. If a credit for recovered materials from this emissions unit is used to demonstrate compliance and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup materials, and the recovery container serving this emissions unit:
- a. the date the materials from the recovery container were shipped off site; and
 - b. the number of gallons or pounds of materials from the recovery container shipped off site.
6. The permittee shall perform inspections of this emissions unit in accordance with the following frequencies:
- a. Keep all containers that store HAP-containing materials closed or covered except during the addition or removal of materials.

Minimum inspection frequency: once per batch of resin mix processed

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- b. The wet area enclosure is in place when resin mix is present in the resin bath, as specified in section A.II.2.h.

Minimum inspection frequency: all times when resin mix is present in the resin bath

The purpose of the inspections is to ensure that equipment standard(s) or work practice(s) to minimize OC emissions are employed. The inspections shall be performed during representative, normal operation conditions.

7. Except as otherwise provided in section A.II.2.h.iv for section A.III.6.b, the permittee shall maintain records of the following information:
 - a. the date and reason any required inspections were not performed in section A.III.6; and
 - b. the date and all times when the wet area enclosure's access panels, doors, hatches or covers were open causing the limit of two times the puller window area to be exceeded when there was resin present in the resin bath and the resin bath was not covered.

The purpose of the inspections is to ensure that the methods to reduce OC emissions are employed. The inspections shall be performed during representative, normal operation conditions.

8. The permittee shall maintain files of all information (including all reports and notifications) in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports, in accordance with the General Terms and Conditions of this permit, which include the following information:

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- a. an identification of each day during which the average hourly OC emissions from this emissions unit exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day;
 - b. an identification of each day during which the OC emissions from emissions unit exceeded 40 pounds per day, and the actual OC emissions for each such day;
 - c. an identification of each day during which an inspection was not performed by the required frequency;
 - d. an identification of each month during which any cleanup material employed contained any VOC and/or HAP, and the actual VOC and/or HAP emissions for each such month; and
 - e. an identification of the date and duration of time that the wet area enclosure was removed or the access panels, doors, and/or hatches was/were open such that the open area was greater than 2 times the puller window area when resin was present in the bath, for a any period of time exceeding 30 minutes per any 8-hours shift, 45 minutes per any 12-hour shift or 90 minutes per any day when the machine operates 24 hours in a day.
2. The permittee shall notify the Northeast District Office in writing of any daily record showing that the particulate control filter was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Northeast District Office within 30 days after the event occurs.
 3. The permittee shall submit annual reports that specify the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by February 1 of each year.

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V. Testing Requirements

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

- a. Emission Limitation:

8 lbs/hr of OC

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation above may be based on the monitoring and record keeping requirements specified in section A.III.3 of this permit.

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

- b. Emission Limitation:

40 lbs/day of OC

Applicable Compliance Method:

Compliance with the daily allowable OC emission limitation above shall be based on the monitoring and record keeping requirements specified in Section A.III.3 of this permit.

- c. Emission Limitation:

2.4 lbs/hr of PE

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation in accordance with Methods 1 through 5 of 40 CFR Part 60,

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Appendix A.

d. Emission Limitation:

PE shall be less than 10.0 tons/yr.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual allowable PE limitation above by multiplying the maximum hourly controlled PE rate [(3.7 pounds/hr) x (1 - 0.9) = 0.37 lb/hr] by the maximum annual number of hours of operation (8760 hours/yr), and then dividing by 2000 lbs/ton.

e. Emission Limitation:

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

Applicable Compliance Method:

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

VI. Miscellaneous Requirements

None

Emissions Unit ID: P043

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment - (P043) - Pultrusion unit

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None