



2/3/2015

Certified Mail

Mr. James Amburgey  
Materion Brush Inc.  
14710 W. Portage River South Rd  
Elmore, OH 43416

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 0362000009  
Permit Number: P0118317  
Permit Type: Administrative Modification  
County: Ottawa

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
Yes	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

**How to appeal this permit**

The issuance of this PTI is a final action of the Director 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, made payable to "Ohio Treasurer Josh Mandel," 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  
77 South High Street, 17th Floor  
Columbus, OH 43215

## **How to save money, reduce pollution and reduce energy consumption**

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: [www.ohioairquality.org/clean\\_air](http://www.ohioairquality.org/clean_air)

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)3528461 or the Office of Compliance Assistance and Pollution Prevention at (614)644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA  
Ohio EPA-NWDO; Michigan; Canada



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install  
for  
Materion Brush Inc.**

Facility ID:	0362000009
Permit Number:	P0118317
Permit Type:	Administrative Modification
Issued:	2/3/2015
Effective:	2/3/2015





**Division of Air Pollution Control**  
**Permit-to-Install**  
for  
Materion Brush Inc.

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**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118317  
**Facility ID:** 0362000009  
**Effective Date:** 2/3/2015

## Authorization

Facility ID: 0362000009  
Facility Description: Copper Rolling and Drawing  
Application Number(s): M0003203  
Permit Number: P0118317  
Permit Description: Administrative modification to R & D beryllium casting process trial line  
Permit Type: Administrative Modification  
Permit Fee: \$0.00  
Issue Date: 2/3/2015  
Effective Date: 2/3/2015

This document constitutes issuance to:

Materion Brush Inc.  
14710 W. Portage River South Road  
1/4 mile east of SR 590  
Harris, OH 43416-9502

of a Permit-to-Install for the emissions unit(s) identified on the following page.

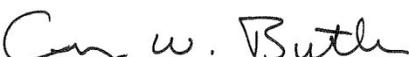
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office  
347 North Dunbridge Road  
Bowling Green, OH 43402  
(419)352-8461

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section 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 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

  
Craig W. Butler  
Director



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118317  
**Facility ID:** 0362000009  
**Effective Date:** 2/3/2015

## Authorization (continued)

Permit Number: P0118317  
Permit Description: Administrative modification to R & D beryllium casting process trial line

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

<b>Emissions Unit ID:</b>	<b>P127</b>
Company Equipment ID:	R & S - 1
Superseded Permit Number:	P0106979
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118317  
**Facility ID:** 0362000009  
**Effective Date:** 2/3/2015

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



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

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A.2.a), Severability Clause
  - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
  - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
  - (4) Standard Term and Condition A.9., Reporting Requirements
  - (5) Standard Term and Condition A.10., Applicability
  - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
  - (7) Standard Term and Condition A.14., Public Disclosure
  - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (9) Standard Term and Condition A.16., Fees
  - (10) Standard Term and Condition A.17., Permit Transfers

## **2. Severability Clause**

- a) 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.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

## **3. General Requirements**

- a) 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.

#### **4. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.
- 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:
  - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.



- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. 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 A.15. below if no deviations occurred during the quarter.
  - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Northwest District Office 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.
  - (4) This permit is for an emissions unit located at a Title V facility. 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.

## **5. 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 Ohio EPA DAPC, Northwest District Office 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).

## **6. Compliance Requirements**

- a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted



local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

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

## **7. Best Available Technology**

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.



**8. 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.

**9. 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 Ohio EPA DAPC, Northwest District Office.
- 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 Ohio EPA DAPC, Northwest District Office. 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, 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.)

**10. 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) not exempt from the requirement to obtain a Permit-to-Install.

**11. Construction of New Sources(s) and Authorization to Install**

- a) 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.
- b) If applicable, authorization to install any new 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 has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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 permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

## **12. Permit-To-Operate Application**

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 operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.



**13. Construction Compliance Certification**

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

**14. 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.

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

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 by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**16. 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.

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

**18. 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.

**19. 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.



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118317  
**Facility ID:** 0362000009  
**Effective Date:** 2/3/2015

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



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

a) None.

2. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, and/or 40 CFR Part 60 or 63:

- B001 4.5 million Btu/hour natural gas fired heater - Hastings PltHtr
- L004 Tooling Cold Cleaner with S-3680 solvent - New Tooling Cold Cleaner
- P002 General Laboratory; Quality Assurance & Research & Development – Laboratory
- P003 500 gallon polystyrene mixing tank - Mix Room Polystyrene Storage Tank
- T004 3,500 gallon resin/styrene storage tank - Tank 1 (previously designated as T001, PTI# 16-980)
- T005 3,500 gallon resin/styrene storage tank - Tank 2 (previously designated as T001, PTI# 16-980)
- T006 5,000 gallon resin/styrene storage tank - Tank 3 (previously designated as T001, PTI# 16-980)
- T007 5,000 gallon resin/styrene storage tank - Tank 4 (previously designated as T001, PTI# 16-980)

[Authority for term:OAC rule 3745-77-07(A)(13)]

3. The emissions of volatile organic compounds (VOC), organic compounds (OC) and styrene from emissions units P901, P904, P905, P907, P908, P909, P910, P911, P912, P913, P914, P915, P919, P922, P923, P924, P925, P926, P929, P930, P931, P932, P933, P934, P935, T003, T004, T005, T006 and T007, combined, shall not exceed 81.0 tons per year, 127.0 tons per year and 43.0 tons per year, respectively, based upon a rolling, 12-month summation of the monthly emission rates.

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

4. In order to determine compliance with the VOC, OC and styrene emission limitations, the permittee shall maintain monthly records of the following information for emissions units P901, P904, P905, P907, P908, P909, P910, P911, P912, P913, P914, P915, P919, P922, P923, P924, P925, P926, P929, P930, P931, P932, P933, P934, P935, T003, T004, T005, T006 and T007, combined:

a) The permittee shall record the following information on a monthly basis for emissions units P901, P904, P905, P907, P908, P909, P910, P911, P912, P913, P914, P915, P922, P923, P924, P925, P926, P932, P933, P934 and P935, combined:

- (1) identification and quantity (pounds) of each resin received for processing;
- (2) styrene content (% by weight) of each resin;
- (3) VOC emissions from each resin, in pounds (i.e.,  $(\% \text{ styrene}/100) \times (\text{resin weight}) \times (0.07^*) \times (1-(CE^{**}/100))$ );
- (4) OC emissions from each resin, in pounds (i.e.,  $(\% \text{ styrene}/100) \times (\text{resin weight}) \times (0.07^*) \times (1-(CE^{**}/100))$ );



- (5) styrene emissions from each resin, in pounds (i.e.,  $(\% \text{ styrene}/100) \times (\text{resin weight}) \times (0.07^*) \times (1-(CE^{**}/100))$ );
- (6) the VOC emission rate from all resins employed, in pounds (i.e., the sum of the VOC emissions from the resins in 4.a)(3) above);
- (7) the OC emission rate from all resins employed, in pounds (i.e., the sum of the OC emissions from the resins in 4.a)(4) above);
- (8) the styrene emission rate from all resins employed, in pounds (i.e., the sum of the styrene emissions from the resins in 4.a)(5) above);
- (9) identification and net usage<sup>\*\*\*</sup> of each cleanup material<sup>\*\*\*\*</sup> employed, in pounds;
- (10) the VOC content of each cleanup material, in weight percent;
- (11) the OC content of each cleanup material, in weight percent;
- (12) the VOC emission rate from all cleanup materials employed, in pounds (i.e., the sum of 4.a)(9) times [4.a)(10) divided by 100] for each cleanup material employed);
- (13) the OC emission rate from all cleanup materials employed, in pounds (i.e., the sum of 4.a)(9) times [4.a)(11) divided by 100] for each cleanup material employed);
- (14) the VOC emission rate for all resins and cleanup materials employed, in pounds (i.e., 4.a)(6) plus 4.a)(12)); and
- (15) the OC emission rate for all resins and cleanup materials employed, in pounds (i.e., 4.a)(7) plus 4.a)(13)).

These calculations shall be based upon a mass balance approach.

\*Emission factor is from AP-42, Table 4.4-2 dated 2/07.

\*\*CE is the emission reduction in weight percent. Wet area enclosures reduce emissions by sixty percent and direct die injection and pre-form injection reduce emissions by ninety percent.

\*\*\*Net usage shall be the difference between quantities received and any returned for disposal/recycling, excluding solids.

\*\*\*\*Activities involving cleanup material include the removal of composite materials, such as cured and uncured resin from equipment, finished surfaces, floors, hands of employees, or any other surfaces, including wipe cleaning of pultruded parts.

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

- b) The permittee shall record the following information on a monthly basis for emissions unit P919:
  - (1) identification and net usage\* of each cleanup material employed, in pounds;
  - (2) the VOC content of each cleanup material, in weight percent;



- (3) the OC content of each cleanup material, in weight percent;
- (4) the VOC emission rate from all cleanup materials employed, in pounds (i.e., the sum of 4.b)(1) times [4.b)(2) divided by 100] for each cleanup material employed); and
- (5) the OC emission rate from all cleanup materials employed, in pounds (i.e., the sum of 4.b)(1) times [4.b)(3) divided by 100] for each cleanup material employed).

\*Net usage shall be the difference between quantities received and any returned for disposal/recycling, excluding solids.

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

- c) The permittee shall record the following information on a monthly basis for emissions units P929, P930 and P931, combined:
- (1) the total throughput of solvent (i.e., styrene), in pounds;
  - (2) the VOC emission rate from the mixing operations, in pounds (i.e., 4.c)(1) times 0.02\*);
  - (3) the OC emission rate from the mixing operations, in pounds (i.e., 4.c)(1) times 0.02\*);
  - (4) the styrene emission rate from the mixing operations, in pounds (i.e., 4.c)(1) times 0.02\*);
  - (5) identification and net usage\*\* of each cleanup material employed, in pounds;
  - (6) the VOC content of each cleanup material, in weight percent;
  - (7) the OC content of each cleanup material, in weight percent;
  - (8) the VOC emission rate from all cleanup materials employed, in pounds (i.e., the sum of 4.c)(5) times [4.c)(6) divided by 100] for each cleanup material employed);
  - (9) the OC emission rate from all cleanup materials employed, in pounds (i.e., the sum of 4.c)(5) times [4.c)(7) divided by 100] for each cleanup material employed);
  - (10) the VOC emission rate from the mixing operations and all cleanup materials employed, in pounds (i.e., 4.c)(2) plus 4.c)(8)); and
  - (11) the OC emission rate from the mixing operations and all cleanup materials employed, in pounds (i.e., 4.c)(3) plus 4.c)(9)).

\*AP-42 Chapter 6.4.1 dated 5/83 states 1 or 2 percent of solvent is lost.

\*Net usage shall be the difference between quantities received and any returned for disposal/recycling, excluding solids.

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



- d) The permittee shall record the following information on a monthly basis for emissions units P901, P904, P905, P907, P908, P909, P910, P911, P912, P913, P914, P915, P919, P922, P923, P924, P925, P926, P929, P930, P931, P932, P933, P934, P935, T003, T004, T005, T006 and T007, combined:
- (1) the VOC emissions, tons per month (i.e., [4.a)(14) plus 4.b)(4) plus 4.c)(10)] divided by 2000 plus [X\*/12]);
  - (2) the OC emissions, tons per month (i.e., [4.a)(15) plus 4.b)(5) plus 4.c)(11)] divided by 2000 plus [Y\*\*/12]);
  - (3) the styrene emissions, tons per month (i.e., [4.a)(8) plus 4.c)(4)] divided by 2000 plus [Z\*\*\*/12]);
  - (4) the rolling, 12-month summation of the monthly emissions of VOC, OC and styrene.

\*\*“X” is the potential to emit of VOC for emissions units T003, T004, T005, T006 and T007, combined, in tons per year.

\*\*“Y” is the potential to emit of OC for emissions units T003, T004, T005, T006 and T007, combined, in tons per year.

\*\*\*“Z” is the potential to emit of styrene for emissions units T003, T004, T005, T006 and T007, combined, in tons per year.

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

5. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a) all exceedances of the rolling, 12-month emission limitation for VOC;
  - b) all exceedances of the rolling, 12-month emission limitation for OC, and
  - c) all exceedances of the rolling, 12-month emission limitation for styrene.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

6. Compliance with the emission limitations in 3. above shall be determined in accordance with the following methods:
- a) Emission Limitations:

The emissions of VOC, OC and styrene from emissions units P901, P904, P905, P907, P908, P909, P910, P911, P912, P913, P914, P915, P919, P922, P923, P924, P925, P926, P929, P930, P931, P932, P933, P934, P935, T003, T004, T005, T006 and T007, combined, shall not exceed 81.0 tons per year, 127.0 tons per year and 43.0 tons per year, respectively, based upon a rolling, 12-month summation of the monthly emission rates.



Applicable Compliance Method:

Compliance with the annual allowable VOC, OC and styrene emission limitations above shall be demonstrated based on the record keeping requirements established in 4.a) through 4.d) above.

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

7. The following emissions units are subject to 40 CFR Part 63, Subpart WWWW: L004, P003, P901, P904, P905, P907, P908, P909, P910, P911, P912, P913, P914, P915, P922, P923, P924, P925, P926, P929, P930, P931, P932, P933, P934, P935, T004, T005, T006 and T007. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website: <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District or local air agency.

8. The permittee shall comply with the applicable emission limitations and work practice standards required under 40 CFR Part 63, Subpart WWWW, including the following sections and Tables:

Section/Table:      Requirement:

63.5805(b)              All operations must meet the organic hazardous air pollutant (HAP) emissions limits in Table 3 of 40 CFR Part 63, Subpart WWWW and the work practice standards in Table 4 of 40 CFR Part 63, Subpart WWWW that apply, regardless of the quantity of HAP emitted.

Table 3                      Organic HAP emission limit for pultrusion operations.

Table 4                      Work practice standards for cleaning operations, HAP-containing materials storage operations and mixing operations.

63.5835(a)              You must be in compliance at all times with the work practices in Table 4 of 40 CFR Part 63, Subpart WWWW, as well as the organic HAP emissions limits in Table 3 of 40 CFR Part 63, Subpart WWWW.

9. The permittee shall comply with one or more of the applicable options listed below for meeting the standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reductions requirement required under 40 CFR Part 63, Subpart WWWW:

Section:                      Requirement:

63.5830(a)              Achieve an overall reduction in organic HAP by employing a control device

63.5830(b)              Design, install, and operate wet area enclosures and resin drip collection systems on pultrusion machines to meet the criteria specified in paragraphs (b)(1) through (10) of this section.

63.5830(c)              Use of 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.

63.5830(d)              Use of a perform injection system that meets the definition in §63.5935.



63.5830(e) Use of any combination of control options in (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 the weighted average reduction based on resin throughput 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.

10. The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections:

<u>Section:</u>	<u>Requirement:</u>
63.5797	How to determine the organic HAP content of the resins and gel coats.
63.5895(c)	Records that you must collect and keep for resin and gel coats.
63.5895(e)	Record all times that wet area enclosures doors or covers are open and there is resin present in the resin bath.
63.5915(a)(1)	You must keep a copy of each notification and report that you submitted to comply with this subpart.
63.5915(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 of 40 CFR Part 63, Subpart WWWW.
63.5915(d)	You must keep a certified statement that you are in compliance with the work practice requirements in Table 4 of 40 CFR Part 63, Subpart WWWW, as applicable.
63.5920(a)	You must maintain all applicable records in such a manner that they can be readily accessed and are suitable for inspection according to §63.10(b)(1).
63.5920(b)	You must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
63.5920(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. You can keep the records offsite for the remaining 3 years.
63.5920(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.

11. The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 63, Subpart WWWW, including the following sections and Tables:



<u>Section/Table:</u>	<u>Requirement:</u>
63.5905(a)	You must submit all of the notification in Table 13 of 40 CFR Part 63, Subpart WWWW that apply to you by the dates specified in Table 13 of 40 CFR Part 63, Subpart WWWW.
63.5905(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.
Table 13	Applicability and Timing of Notifications.
63.5910(a)	You must submit each report in Table 14 of 40 CFR Part 63, Subpart WWWW that applies to you.
Table 14	Requirements for Reports.
63.5910(b)	You must submit each report by the date specified in Table 14 of 40 CFR Part 63, Subpart WWWW and according to paragraphs (b)(1) through (5) of this section.
63.5910(c)	Compliance reports must contain the information in paragraphs (c)(1) through (6) this section.
63.5910(d)	For each deviation from an organic HAP emissions limitation and for each deviation from the requirements for work practice standards that occurs at an affected source, 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.
63.5910(g)	Each affect source that has obtained a Title V operating permit must report all deviations as defined by 40 CFR Part 63, Subpart WWWW in the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A).
63.5910(i)	Where multiple compliance options are available, you must state in your next compliance report if you have changed compliance options since your last compliance report.

12. The permittee shall demonstrate initial and continuous compliance with 40 CFR Part 63, Subpart WWWW as described in the following sections:

<u>Section/Table:</u>	<u>Requirement:</u>
63.5860(a)	Demonstrate initial compliance with the organic HAP emission standard by using procedures shown in Table 8 and 9 of 40 CFR Part 63, Subpart WWWW.
Table 8	Initial Compliance with Organic HAP Emissions Limits.
Table 9	Initial Compliance with Work Practice Standards.
63.5900(a)(2)	Compliance with the organic HAP emission limit is demonstrated by maintaining an organic HAP emissions factor value less than or equal to the appropriate



organic HAP emission limit listed in Table 3 of 40 CFR Part 63, Subpart WWWW, on a 12-month rolling average.

- 63.5900(a)(4) Compliance with the work practice standards in Table 4 of 40 CFR Part 63, Subpart WWWW is demonstrated by performing the work practice required for your operation.
- 63.5900(b) You must report each deviation from each standard in §63.5805 that applies to you. The deviations must be reported according to the requirements in §63.5910.
- 63.5900(c) During periods of startup, shutdown or malfunction, you must meet the organic HAP emission limits and work practice standards that apply to you.



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118317  
**Facility ID:** 0362000009  
**Effective Date:** 2/3/2015

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



**1. P919, General Fab. Machs.**

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

General Fabrication Machines

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	20.0 pounds of total organic materials*/** per day  0.2 pound of particulate emissions (PE) per hour  See c)(1) below.  *As defined under OAC rule 3745-21-01.  **Includes cleanup material emissions.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-31-05(D).
b.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid Non-Attainment New Source Review)	See 3, 4, 4.a) through 4.d), 5 and 6 of Section B. Facility-Wide Terms and Conditions.
c.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).



(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The PE from the emissions unit listed above shall be vented to either a baghouse or a dust extractor unit when the emissions unit is in operation.

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

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record the following information on a daily basis for this emissions unit:

- a. identification and net usage\* of each cleanup material employed, in pounds;
- b. the OC content of each cleanup material, in weight percent;
- c. the OC emission rate from all cleanup materials employed, in pounds (i.e., the sum of d)(1)a. times [d)(1)b. divided by 100] for each cleanup material employed);

\*Net usage shall be the difference between quantities received and any returned for disposal/recycling, excluding solids.

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

(2) The permittee shall document when the baghouse or the dust extractor unit was not in service when the emissions unit was in operation.

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

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

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



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

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. Each day during which the total organic material emissions exceeded 20.0 pounds per day, and the actual organic material emissions for each such day.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

- (2) The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record in which the baghouse or the dust extractor unit servicing the emissions unit 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 Director (the appropriate District Office or local air agency) within 30 days after the event occurs.

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

- (3) The permittee shall submit quarterly written reports that identify:
  - a. all days during which any visible PE were observed from the stack serving this emissions unit; and
  - b. any corrective actions taken to minimize or eliminate the visible PE.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

- (4) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements



- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
  - a. Emission Limitation:

20.0 pounds of total organic materials per day

Applicable Compliance Method:

Compliance with the daily allowable total organic materials emission limitation above shall be demonstrated based on the record keeping requirements established in d)(1) above. Formulation data shall be used to determine the total organic material content of each cleanup material employed.

[Authority for term: OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]
  - b. Emission Limitation:

0.2 pound of PE per hour

Applicable Compliance Method:

If required, compliance with the hourly allowable PE limitation above 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 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1)]
  - c. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the allowable visible PE limitation above shall be demonstrated by visible PE observations performed in accordance with the method and procedures specified in OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rule 3745-17-03(B)(1) and OAC rule 3745-77-07(C)(1)].
- g) Miscellaneous Requirements
  - (1) None.



**2. Emissions Unit Group -Mixers: P929, P930, P931,**

EU ID	Operations, Property and/or Equipment Description
P929	Process resin batch mixer - Resin Mix Station #1 (previously designated as P916)
P930	Process resin batch mixer - Resin Mix Station #2 (previously designated as P916)
P931	Special process resin batch mixer - Resin Mix Station #3 (previously designated as P916)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	For emissions units P929, P930 and P931: 3.32pounds oforganic compounds (OC) per hour for each emissions unit, from mixing*  *Does not include emissions from cleanup material.  See b)(2)a. below.  0.2 pound of particulate emissions (PE) per hour for emissions units P929, P930 and P931, combined  See c)(5) below.  The requirements of this rule also include compliance with the requirements of OAC rules3745-17-07(A), 3745-21-25 and 3745-31-05(D).
b.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid Non-Attainment New Source Review)	See 3, 4, 4.a) through 4.d), 5 and 6 of Section B. Facility-Wide Terms and Conditions.
c.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-21-25	The permittee shall comply with the following terms and conditions: c)(1) through c)(4), d)(1), d)(2), d)(3), e)(1), e)(2), e)(3) and e)(4) below.
f.	40 CFR Part 63, Subpart WWWW	See 7 through 12 of Section B. Facility-Wide Terms and Conditions.
g.	40 CFR Part 63, Subpart A (40 CFR Part 63.5925)	Table 15 to Subpart WWWW of Part 63 - Applicability of General Provisions (Subpart A) to Subpart WWWW of Part 63 shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

a. The hourly OC emission limitations were established to reflect the potentials to emit for these emissions units. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these short term emission limitations.

c) Operational Restrictions

(1) The permittee shall use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1.0 inch are permissible around mixer shafts and any required instrumentation.

[Authority for term: Table 1 of OAC rule 3745-21-25 and OAC rule 3745-77-07(A)(1)]

(2) The permittee shall close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety.

[Authority for term: Table 1 of OAC rule 3745-21-25 and OAC rule 3745-77-07(A)(1)]

(3) The permittee shall keep the mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.

[Authority for term: Table 1 of OAC rule 3745-21-25 and OAC rule 3745-77-07(A)(1)]

(4) The permittee shall not use cleaning solvents (cleaners) that have a volatile organic compound (VOC) content greater than 0.42 pound VOC per gallon, except cleaners used in closed systems and used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.



[Authority for term: Table 1 of OAC rule 3745-21-25 and OAC rule 3745-77-07(A)(1)]

- (5) The PE from the emissions units listed above shall be vented to the baghouse when one or more of the emissions units are in operation.

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

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

- (1) The permittee shall keep a copy of each applicability notification and compliance status report submitted to comply with OAC rule 3745-21-25, including all documentation supporting any applicability or compliance status.

[Authority for term: OAC rule 3745-21-25(P)(1)(a) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall keep a certified statement that operations are in compliance with the work practice standards specified in c)(1) through c)(4) above.

[Authority for term: OAC rule 3745-21-25(P)(1)(e) and OAC rule 3745-77-07(C)(1)]

- (3) All records specified in d)(1) and d)(2) above shall be retained by the permittee for a period of not less than five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record and shall be made available to the director or any authorized representative of the director for review during normal business hours.

[Authority for term: OAC rule 3745-21-25(P)(4) and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall document when the baghouse was not in service when the emissions unit(s) was/were in operation.

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

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

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



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

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

e) Reporting Requirements

- (1) The owner or operator of a facility that has reinforced plastic composites production operations subject to OAC rule 3745-21-25 shall submit semiannual compliance status reports containing the information specified in e)(2)a. to e)(2)f. below. The semiannual compliance status reports shall be submitted no later than thirty calendar days after the end of each six-month period to the appropriate Ohio environmental protection agency district office or local air agency. The first compliance report shall cover the period beginning on the compliance date that is specified in paragraph (R) of OAC rule 3745-21-25 and ending on June thirtieth or December thirty-first, whichever date is the first date following the end of the first calendar half after the compliance date that is specified in paragraph (R) of OAC rule 3745-21-25. Each subsequent compliance report shall cover the semiannual reporting period from January first through June thirtieth or the semiannual reporting period from July first through December thirty-first.

[Authority for term: OAC rule 3745-21-25(Q)(1) and OAC rule 3745-77-07(C)(1)]

- (2) The compliance report shall contain the information specified in e)(2)a. to e)(2)f. below.
  - a. Company name and address.
  - b. 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.
  - c. Date of the report and beginning and ending dates of the reporting period.
  - d. If there are no deviations from any VOC emissions limitations and operating limits that apply and there are no deviations from the work practice standards in table 1 of OAC rule 3745-21-25, a statement that there were no deviations from VOC emissions limitations, operating limits, or work practice standards during the reporting period.
  - e. For each deviation from a VOC emissions limitation or operating limit and for each deviation from a work practice standard that occurs at an affected operation where a CMS is not used to comply with the VOC emissions limitation, operating limit, or work practice standard in OAC rule 3745-21-25, the compliance report shall contain the information in e)(2)e.i. and e)(2)e.ii. below.



- i. The total operating time of each affected operation during the reporting period.
  - ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- f. Where multiple compliance options are available, the owner or operator shall state in this compliance report if the owner or operator has changed compliance options since the last compliance report.

[Authority for term: OAC rule 3745-21-25(Q)(3) and OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall report if the facility exceeded the one hundred tons of VOC per year emissions threshold if that exceedance would make the facility subject to paragraph (D)(3) of OAC rule 3745-21-25.

[Authority for term: OAC rule 3745-21-25(Q)(4) and OAC rule 3745-77-07(C)(1)]

- (4) Each facility that has obtained a Title V permit pursuant to Chapter 3745-77 of the Administrative Code shall report all deviations as described in OAC rule 3745-21-25 in the semiannual monitoring report required by the Title V permit. If the facility submits a semiannual compliance report pursuant to OAC rule 3745-21-25 along with, or as part of, the semiannual monitoring report required by the facility's Title V permit, and the semiannual compliance report includes all required information concerning deviations from any VOC emissions limitation, operating limit, or work practice standard in OAC rule 3745-21-25, submission of the semiannual 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 appropriate Ohio environmental protection agency district office or local air agency.

[Authority for term: OAC rule 3745-21-25(Q)(5) and OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record in which the baghouse servicing these emissions units was not in service when the emissions unit(s) was/were in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.

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

- (6) The permittee shall submit quarterly written reports that identify:
- a. all days during which any visible PE were observed from the stack serving these emissions units; and
  - b. any corrective actions taken to minimize or eliminate the visible PE.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.



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

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

For emissions units P929, P930 and P931: 3.32pounds ofOC per hour for each emissions unit from mixing

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation aboveshall be demonstrated by multiplying the maximum hourly solvent usage, in pounds of solvent per hour, by 0.02\*

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.

\*AP-42 Chapter 6.4.1 dated 5/83 states 1 or 2 percent of solvent is lost.

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

b. Emission Limitation:

0.2 pound of PE per hour for emissions units P929, P930 and P931, combined

Applicable Compliance Method:

If required, compliance with the hourly allowable PE limitation above 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) and OAC rule 3745-31-05(A)(3)]

c. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the allowable visible PE limitation above shall be demonstrated by visible PE 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)]



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118317  
**Facility ID:** 0362000009  
**Effective Date:** 2/3/2015

g) Miscellaneous Requirements

(1) None.



**3. Emissions Unit Group - Pultrusion Lines: P901, P904, P905, P907, P908, P909, P910, P911, P912, P913, P914, P915, P922, P923, P924, P925, P926, P932, P933, P934, P935,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
P901	Pultrusion Process Production Unit - Production Line 1
P904	Pultrusion Process Production Unit - Production Line 4
P905	Pultrusion Process Production Unit - Production Line 5
P907	Pultrusion Process Production Unit - Production Line 7
P908	Pultrusion Process Production Unit - Production Line 8
P909	Pultrusion Process Production Unit - Production Line 9
P910	Pultrusion Process Production Unit - Production Line 10
P911	Pultrusion Process Production Unit - Production Line 11, Cavity 1
P912	Pultrusion Process Production Unit - Production Line 11, Cavity 2
P913	Pultrusion Process Production Unit - Production Line 11, Cavity 3
P914	Pultrusion Process Production Unit - Production Line 13
P915	Pultrusion Process Production Unit - Production Line 12, Cavity 1
P922	Pultrusion Process Production Unit - Production Line 12, Cavity 2
P923	Pultrusion Process Production Unit - Production Line 14, Cavity 1
P924	Pultrusion Process Production Unit - Production Line 14, Cavity 2
P925	Pultrusion Process Production Unit - Production Line 14, Cavity 3
P926	Pultrusion Process Production Unit - Production Line 14, Cavity 4
P932	Pultrusion Process Production Unit - Production Line 15
P933	Pultrusion Process Production Unit - Production Line 16
P934	Pultrusion Process Production Unit - Production Line 2
P935	Pultrusion Process Production Unit - Production Line 3

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) and ORC 3704.03(T)	For emissions unit P932, P933, P934 and P095, the emission limitation specified by this rule is equivalent to the emission limitation established pursuant to 40 CFR Part 63, Subpart WWWW.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	For emissions units P934 and P935, the particulate emissions (PE) from each



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>emissions unit shall not exceed 0.88 ton per year, based upon a rolling, 12-month summation of the monthly emission rates.</p> <p>See b)(2)c. below.</p>
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>For emissions units P932 and P933, the PE from each emissions unit shall not exceed 0.2 pound per hour and 0.88 ton per year.</p> <p>See b)(2)c. and b)(2)f. below.</p>
d.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	For emissions units P932, P933, P934 and P935, see b)(2)d. below.
e.	OAC rule 3745-31-05(A)(3)	<p>For emissions units P901, P904, P905, P907-P915 and P922-P926: 4.42 pounds of organic compounds (OC) per hour, from the pultrusion process* for each emissions unit.</p> <p>*Does not include emissions from cleanup material.</p> <p>For emissions units P901, P904, P905, P907-P915 and P922-P926: 0.2 pound of PE per hour for each emissions unit.</p> <p>See b)(2)e. below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-21-25, and 3745-31-05(D).</p>
f.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid Non-Attainment New Source Review)	See 3, 4, 4.a) through 4.d), 5 and 6 of Section B. Facility-Wide Terms and Conditions.
g.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
h.	OAC rule 3745-17-11(B)	<p>For emissions units P932, P933, P934 and P935, the PE from each emissions unit shall not exceed 1.28 pounds per hour.</p> <p>This emission limitation applies after the Ohio's State Implementation Plan (SIP) is approved as noted below in b)(2)d. removing the Best Available Technology</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		(BAT) limitations.  For emissions units P901, P904, P905, P907-P915 and P922-P926, the emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
i.	OAC rule 3745-21-25	Reduce total volatile organic compound (VOC) emissions by at least sixty per cent by weight.  The permittee shall comply with the following terms and conditions: b)(2)a., b)(2)b., d)(1), d)(2), d)(3), d)(4), d)(5), d)(6), d)(7), e)(1), e)(2), e)(3), e)(4), e)(5), e)(6), f)(1)f. and f)(2) below.  Upon achieving compliance with this rule, the reinforced plastic composites production operations at the facility are not required to meet OAC rule 3745-21-07.
j.	40 CFR Part 63, Subpart WWWW	See 7 through 12 of Section B. Facility-Wide Terms and Conditions.
k.	40 CFR Part 63, Subpart A (40 CFR Part 63.5925)	Table 15 to Subpart WWWW of Part 63 - Applicability of General Provisions (Subpart A) to Subpart WWWW of Part 63 shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. For pultrusion operations, the permittee shall use one or more of the options in b)(2)a.i. to b)(2)a.v. below to meet the sixty weight per cent VOC emission limit in table 2 of OAC rule 3745-21-25:
  - i. Achieve an overall reduction in VOC emissions of sixty per cent by weight capturing the VOC emissions and venting them to a control device or any combination of control devices. Conduct capture and destruction efficiency testing as specified in 40 CFR 63.5850 to determine the per cent VOC emissions reduction.
  - ii. Design, install, and operate wet area enclosures and resin drip collection systems on pultrusion machines that meet the criteria in b)(2)a.ii.(a) to b)(2)a.ii.(j) below.



- (a) The enclosure shall 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 shall be closed except for openings to allow material to enter and exit the enclosure.
- (b) For open bath pultrusion machines with a radio frequency pre-heat unit, the enclosure shall 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 shall 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
- (c) For open bath pultrusion machines without a radio frequency pre-heat unit, the enclosure shall extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
- (d) For pultrusion lines with pre-wet area(s) prior to direct die injection, no more than 12.5 inches of open wet stock is permitted between the entrance of the first pre-wet area and the entrance to the die. If the pre-wet stock has any drip, it shall be enclosed.
- (e) The total open area of the enclosure shall not exceed two times the cross sectional area of the puller window(s) and shall comply with the requirements in b)(2)a.ii.(e)(i) to b)(2)a.ii.(e)(iii) below.
  - (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.
- (f) Open areas for level control devices, monitoring devices, agitation shafts, and fill hoses shall have no more than 1.0 inch clearance.
- (g) The access panels, doors, and/or hatches that are part of the enclosure shall close tightly. Damaged access panels, doors, and/or hatches that do not close tightly shall be replaced.
- (h) The enclosure may not be removed from the pultrusion line, and access panels, doors, and/or hatches that are part of the enclosure shall remain closed whenever resin is in the bath, except for the time period discussed in b)(2)a.ii.(i) below.



- (i) 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 thirty minutes per eight-hour shift, forty-five minutes per twelve-hour shift or ninety minutes per day if the machine is operated for twenty-four 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 shall not exceed the times shown in this paragraph. All lines included in the average shall have operated the entire time period being averaged.
    - (j) No fans, blowers and/or air lines may be allowed within the enclosure. The enclosure shall not be ventilated.
  - iii. Use direct die injection pultrusion machines with resin drip collection systems that meet all the criteria specified in b)(2)a.iii.(a) to b)(2)a.iii.(c) below.
    - (a) All the resin that is applied to the reinforcement is delivered directly to the die.
    - (b) No exposed resin is present, except at the face of the die.
    - (c) Resin drip is captured in a closed system and recycled back to the process.
  - iv. Use a pre-form injection system that meets the definition in paragraph (GG)(60) of rule 3745-21-01 of the Administrative Code.
  - v. Use any combination of options in b)(2)a.i. to b)(2)a.iv. above in which different pultrusion lines comply with different options described in b)(2)a.i. to b)(2)a.iv. above; and
    - (a) Each individual pultrusion machine meets the sixty per cent reduction requirement; or
    - (b) The weighted average reduction based on resin throughput of all pultrusion machines combined is sixty per cent. For purposes of the average per cent reduction calculation, wet area enclosures reduce VOC emissions by sixty per cent, and direct die injection and pre-form injection reduce VOC emissions by ninety per cent. For averaging purposes, zero reduction credit is earned during production on lines that have not installed and operated enclosures or injection systems as described in b)(2)a.i. to b)(2)a.iv. above.
- b. The permittee shall not use cleaning solvents (cleaners) that have a VOC content greater than 0.42 pound VOC per gallon, except cleaners used in closed systems



and used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.

- c. The permittee has satisfied the BAT requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's SIP. Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from the emissions units listed above since the uncontrolled potential to emit for PE is each less than 10 tons per year for each emissions unit.

- e. The hourly PE and OC emission limitations were established to reflect the potentials to emit for the emissions units listed above. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these emission limitations.
- f. The hourly and annual PE limitations were established to reflect the potential to emit for the emissions units listed above. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these emission limitations.

c) Operational Restrictions

- (1) The PE from the emissions units listed above shall be vented to either a baghouse or a dust extractor unit when one or more of the emissions units are in operation.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) Procedures for determination of VOC emissions factors for reinforced plastic composites production operations and determination of monomer content of resins and gel coats.

- a. Emissions factors are used in OAC rule 3745-21-25 to determine compliance with certain VOC emissions limits in table 2 and table 3 of OAC rule 3745-21-25 and to calculate VOC emissions. A person may use the equations in table 1 to Subpart WWWW of 40 CFR 63 to calculate such emissions factors or may use



any VOC emissions factor approved by USEPA, such as emission factors or emission factor equations from AP-42. These equations and emissions factors are intended to provide a method for one to demonstrate compliance without the need to conduct a VOC emissions test. In lieu of these equations and emissions factors, the permittee can elect to use site-specific VOC emissions factors to demonstrate compliance and to calculate VOC emissions provided the site specific VOC emissions factors are incorporated in the facility's air emissions permit and are based on actual facility VOC emissions test data using the test procedures in 40 CFR 63.5850 or paragraph (C) of rule 3745-21-10 of the Administrative Code. Stack test data for the facility shall supersede emission factors and other emission estimating techniques.

- b. In order to determine the monomer content of resins and gel coats, the permittee 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 d)(1)b.i. to d)(1)b.iii. below, as applicable.
  - i. Include in the total monomer content each monomer compound that is present at 0.1 per cent by mass or more for OSHA-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4) and at 1.0 per cent by mass or more for other monomer compounds.
  - ii. If the monomer content is provided by the material supplier or manufacturer as a range, the permittee shall use the upper limit of the range for determining compliance. If a separate measurement of the total monomer content, such as an analysis of the material by USEPA method 311 of appendix A to 40 CFR Part 63, exceeds the upper limit of the range of the total monomer content provided by the material supplier or manufacturer, then the permittee shall use the measured monomer content to determine compliance.
  - iii. If the monomer content is provided as a single value, the permittee may use that value to determine compliance. If a separate measurement of the total monomer content is made and is less than two percentage points higher than the value for total monomer content provided by the material supplier or manufacturer, then the permittee still may use the provided value to demonstrate compliance. If the measured total monomer content exceeds the provided value by two percentage points or more, then the permittee shall use the measured total monomer content to determine compliance.

[Authority for term: OAC rule 3745-21-25(E) and OAC rule 3745-77-07(C)(1)]

- (2) For meeting any VOC emission limitations based on a VOC emission limitation specified in table 2 or table 3 of OAC rule 3745-21-25, the permittee shall collect and keep records of resin and gel coat use, monomer content, and operation where the resin is used. Resin use records may be based on purchase records if the permittee can reasonably estimate how the resin is applied. The monomer content records may be based on MSDS or on resin specifications supplied by the resin supplier.



[Authority for term: OAC rule 3745-21-25(O)(2)(b) and OAC rule 3745-77-07(C)(1)]

- (3) For each pultrusion machine, the permittee shall record all times that doors or covers of wet area enclosures are open and there is resin present in the resin bath.

[Authority for term: OAC rule 3745-21-25(O)(2)(d) and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall keep a copy of each applicability notification and compliance status report submitted to comply with OAC rule 3745-21-25, including all documentation supporting any applicability or compliance status.

[Authority for term: 3745-21-25(P)(1)(a) and OAC rule 3745-77-07(C)(1)]

- (5) For operations listed in tables 2, 3 and 4 of OAC rule 3745-21-25, the permittee shall keep all data, assumptions, and calculation used to determine monomer contents and VOC emissions factors.

[Authority for term: OAC rule 3745-21-25(P)(1)(c) and OAC rule 3745-77-07(C)(1)]

- (6) The permittee shall keep a certified statement that operations are in compliance with the work practice standards specified in b)(2)b. above.

[Authority for term: OAC rule 3745-21-25(P)(1)(e) and OAC rule 3745-77-07(C)(1)]

- (7) All records specified in d)(4), d)(5) and d)(6) above shall be retained by the permittee for a period of not less than five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record and shall be made available to the director or any authorized representative of the director for review during normal business hours.

[Authority for term: OAC rule 3745-21-25(P)(4) and OAC rule 3745-77-07(C)(1)]

- (8) The permittee shall document when the baghouse or the dust extractor unit was not in service when the emissions unit(s) was/were in operation.

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

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

- a. the stack identification;
- b. identification of the emissions units which are vented to the stack;
- c. the color of the emissions;
- d. whether the emissions are representative of normal operations;



- e. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- f. the total duration of any visible emissions incident; and
- g. any corrective actions taken to minimize or eliminate the visible emissions.

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

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

e) Reporting Requirements

- (1) The owner or operator of a facility that has reinforced plastic composites production operations subject to OAC rule 3745-21-25 shall submit semiannual compliance status reports containing the information specified in e)(3)a. to e)(3)f. below. The semiannual compliance status reports shall be submitted no later than thirty calendar days after the end of each six-month period to the appropriate Ohio environmental protection agency district office or local air agency. Each compliance report shall cover the semiannual reporting period from January first through June thirtieth or the semiannual reporting period from July first through December thirty-first.

[Authority for term: OAC rule 3745-21-25(Q)(1) and OAC rule 3745-77-07(C)(1)]

- (2) For each facility that is subject to permitting requirements pursuant to Chapter 3745-77 of the Administrative Code (pertaining to Title V permits), the permittee may submit the first and subsequent semiannual compliance reports according to the dates established within the facility's Title V permit, instead of according to the dates specified in e)(1) above.
- (3) The compliance report shall contain the information specified in e)(3)a. to e)(3)f. below.
  - a. Company name and address.
  - b. 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.
  - c. Date of the report and beginning and ending dates of the reporting period.
  - d. If there are no deviations from any VOC emissions limitations and operating limits that apply and there are no deviations from the work practice standards in table 1 of OAC rule 3745-21-25, a statement that there were no deviations from



VOC emissions limitations, operating limits or work practice standards during the reporting period.

- e. For each deviation from a VOC emissions limitation or operating limit and for each deviation from a work practice standard that occurs, the compliance report shall contain the information in e)(3)e.i. and e)(3)e.ii. below.
  - i. The total operating time of each affected operation during the reporting period.
  - ii. Information on the number, duration and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- f. Where multiple compliance options are available, the owner or operator shall state in this compliance report if the owner or operator has changed compliance options since the last compliance report.

[Authority for term: OAC rule 3745-21-25(Q)(3) and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall report if the facility exceeded the one hundred tons of VOC per year emissions threshold if that exceedance would make the facility subject to paragraph (D)(3) of OAC rule 3745-21-25.

[Authority for term: OAC rule 3745-21-25(Q)(4) and OAC rule 3745-77-07(C)(1)]

- (5) Each facility that has obtained a Title V permit pursuant to Chapter 3745-77 of the Administrative Code shall report all deviations as described in OAC rule 3745-21-25 in the semiannual monitoring report required by the Title V permit. If the facility submits a semiannual compliance report pursuant to OAC rule 3745-21-25 along with, or as part of, the semiannual monitoring report required by the facility's Title V permit, and the semiannual compliance report includes all required information concerning deviations from any VOC emissions limitation, operating limit, or work practice standard in OAC rule 3745-21-25, submission of the semiannual 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 appropriate Ohio environmental protection agency district office or local air agency.

[Authority for term: OAC rule 3745-21-25(Q)(5) and OAC rule 3745-77-07(C)(1)]

- (6) For emissions units P934 and P935, the permittee shall notify the appropriate Ohio environmental protection agency district office or local air agency in writing that such operation is subject to OAC rule 3745-21-25. The notification, which shall be submitted not later than the date of initial startup of the affected operations, shall provide the following information:
  - a. Name and address of the owner or operator;
  - b. Address (i.e., physical location) of the facility;



- c. Equipment description and Ohio EPA application number (if assigned) of the affected operation;
- d. Identification of the applicable requirements, the means of compliance and the compliance date for the affected operation under OAC rule 3745-21-25; and
- e. Regarding a permit for the affected operation, whichever of the following is applicable:
  - i. Submission of an application for an operating permit, a permit modification or an operating permit renewal in accordance with rule 3745-31-02 of the Administrative Code; or
  - ii. Submission of a statement of intent to submit an application for a Title V permit or modification of a Title V permit in accordance with rule 3745-77-02 or 3745-77-06 of the Administrative Code, respectively.

[Authority for term: OAC rule 3745-21-25(S)(1) and OAC rule 3745-77-07(C)(1)]

- (7) The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record in which the baghouse or dust extraction unit servicing these emissions units was not in service when the emissions unit(s) was/were in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.

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

- (8) The permittee shall submit quarterly written reports that identify:
  - a. all days during which any visible PE were observed from the stack(s) serving these emissions units; and
  - b. any corrective actions taken to minimize or eliminate the visible PE.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitations:

For emissions units P901, P904, P905, P907-P915 and P922-P926: 0.2 pound of PE per hour for each emissions unit.



For emissions units P932 and P933, the PE from each emissions unit shall not exceed 0.2 pound per hour.

Applicable Compliance Method:

If required, compliance with the hourly allowable PE limitations above 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) and OAC rule 3745-31-05(A)(3)]

b. Emission Limitation:

For emissions units P932 and P933, the PE from each emissions unit shall not exceed 0.88 ton per year.

Applicable Compliance Method:

Compliance with the annual allowable PE limitation above shall be demonstrated by multiplying the hourly allowable PE limitation by 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual allowable emission limitation shall be demonstrated.

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

c. Emission Limitation:

For emissions units P932, P933, P934 and P935, the PE from each emissions unit shall not exceed 1.28 pounds per hour.

Applicable Compliance Method:

If required, compliance with the hourly allowable PE limitation above 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) and OAC rule 3745-31-05(A)(3)]

d. Emission Limitation:

For emissions units P934 and P935, the PE from each emissions unit shall not exceed 0.88 ton per year, based upon a rolling, 12-month summation of the monthly emission rates.

Applicable Compliance Method:

The annual allowable PE limitation above was established by multiplying the maximum hourly PE (0.2 pound per hour) by 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, as long as compliance with



the maximum hourly PE (0.2 pound per hour) is maintained, compliance with the annual allowable emission limitation shall be demonstrated.

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

e. Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the allowable visible PE limitation above shall be demonstrated by visible PE 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)]

f. Emission Limitation:

Reduce total VOC emissions by at least sixty per cent by weight

Applicable Compliance Method:

Compliance with the allowable total VOC emission limitation above shall be demonstrated by maintaining a VOC emission factor value less than or equal to the appropriate VOC emissions limit listed in table 2 or table 3 of OAC rule 3745-21-25, on a twelve-month rolling average and shall be demonstrated based on the record keeping requirements established in d)(1), d)(2), d)(3) and d)(5) above.

g. Emission Limitation:

For emissions units P901, P904, P905, P907-P915 and P922-P926: 4.42 pounds of OC per hour, from the pultrusion process for each emissions unit.

Applicable Compliance Method:

Compliance with the hourly allowable OC emission limitation above shall be demonstrated by multiplying the maximum pounds of styrene per hour by 0.07\*.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation based on the results of emission testing conducted in accordance with Methods 1-4 and 18, 25 or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

\*Emission factor is from AP-42, Table 4.4-2 dated 2/07.

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

- (2) Compliance with the work practice standards in table 1 of OAC rule 3745-21-25 is demonstrated by performing the work practice required for the affected operation.



**Final Permit-to-Install**  
Materion Brush Inc.  
**Permit Number:** P0118317  
**Facility ID:** 0362000009  
**Effective Date:** 2/3/2015

[Authority for term: OAC rule 3745-21-25(O)(1)(a)(ii) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.