



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Craig W. Butler, Director

9/11/2015

Robert Usab
 Polynt Composites USA, Inc
 99 East Cottage Avenue
 Carpentersville, IL 60110

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
 Facility ID: 0322020129
 Permit Number: P0108285
 Permit Type: Initial Installation
 County: Erie

Certified Mail

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

How to give us feedback on your permitting experience

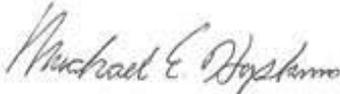
Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

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 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)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

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



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
Polynt Composites USA, Inc**

Facility ID:	0322020129
Permit Number:	P0108285
Permit Type:	Initial Installation
Issued:	9/11/2015
Effective:	9/11/2015



Division of Air Pollution Control
Permit-to-Install
for
Polynt Composites USA, Inc

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Final Permit-to-Install
Polynt Composites USA, Inc
Permit Number: P0108285
Facility ID: 0322020129
Effective Date: 9/11/2015

Authorization

Facility ID: 0322020129
Facility Description:
Application Number(s): A0042100, A0048097, A0053936, A0053991
Permit Number: P0108285
Permit Description: Initial PTI for mixers and auxiliary operations for the production of unsaturated polyester resins.
Permit Type: Initial Installation
Permit Fee: \$6,900.00
Issue Date: 9/11/2015
Effective Date: 9/11/2015

This document constitutes issuance to:

Polynt Composites USA, Inc
1321 FIRST ST
Sandusky, OH 44870

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

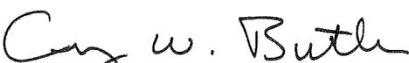
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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



Authorization (continued)

Permit Number: P0108285
 Permit Description: Initial PTI for mixers and auxiliary operations for the production of unsaturated polyester resins.

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

- Emissions Unit ID: P003**
 Company Equipment ID: 2-30 HP MIXERS, PROCESS TWO
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P004**
 Company Equipment ID: 10 HP MIXER, PROCESS THREE
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P005**
 Company Equipment ID: TEN-1 HP MIXERS, PROCESS FOUR
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P007**
 Company Equipment ID: 20 HP MIXER
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P008**
 Company Equipment ID: 4.02 hp mixer
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P009**
 Company Equipment ID: Styrene Cleaning Operation
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P801**
 Company Equipment ID: Equipment Leaks
 Superseded Permit Number:
 General Permit Category and Type: Not Applicable

Group Name: Mixers subject to MACT and RTO

Emissions Unit ID:	P002
Company Equipment ID:	100 HP MIXER, PROCESS ONE
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P006
Company Equipment ID:	60 HP MIXER
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
Polynt Composites USA, Inc
Permit Number: P0108285
Facility ID: 0322020129
Effective Date:9/11/2015

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
Polynt Composites USA, Inc
Permit Number: P0108285
Facility ID: 0322020129
Effective Date:9/11/2015

B. Facility-Wide Terms and Conditions



Final Permit-to-Install
Polynt Composites USA, Inc
Permit Number: P0108285
Facility ID: 0322020129
Effective Date:9/11/2015

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.



Final Permit-to-Install
Polynt Composites USA, Inc
Permit Number: P0108285
Facility ID: 0322020129
Effective Date:9/11/2015

C. Emissions Unit Terms and Conditions

1. P003, (2) 30 HP MIXERS, PROCESS TWO

Operations, Property and/or Equipment Description:

(2) 30 HP MIXERS

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)	<p>Volatile organic compound (VOC) emissions shall not exceed 3.89 pounds per hour and 17.02 tons per year. [See b)(2)e.]</p> <p>Particulate matter emissions less than or equal to 10 microns in diameter (PM₁₀) shall not exceed 0.56 pound per hour and 2.47 tons per year.</p> <p>See b)(2)a.</p>
b.	OAC rule 3745-21-07(M)(3)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.
e.	<p>40 CFR, Part 63, Subpart HHHHH [40 CFR 63.7980-63.8105]</p> <p>[In accordance with 40 CFR 63.8005(d) this emissions unit is a portable process vessel at an existing miscellaneous coating manufacturing operation subject to the emissions limitations/control measures specified in this section]</p>	<p>Work Practice Standards [Table I -#1.a] – See b)(2)d.</p> <p>See c(1), d)(4) and e)(1)</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR, Part 63.1 through 63.15 [40 CFR 63.8095]	Table 10 to Subpart HHHHH of 40 CFR, Part 63 – Applicability of General Provisions to Subpart HHHHH shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be the following:
 - i. the emissions from this emissions unit shall be vented to a baghouse whenever any one or more of the following air contaminant sources are in operation (P003, P004, P005, P007 and P008) with a minimum capture efficiency of 100% and a minimum control efficiency of 90%, for PE and PM₁₀;
 - ii. compliance with the requirements of OAC rule 3745-17-07(A)(1);
 - iii. compliance with the requirements of 40 CFR Part 63, Subpart HHHHH; and
 - iv. compliance with terms and conditions of this permit.
- b. This emission unit is not subject to the requirements of the rule because they do not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- c. The emission limitation established by this rule is less stringent than the emission limitation established under OAC rule 3745-31-05(A)(3).
- d. The permittee shall equip the vessel with a cover or lid at all times except for material additions and sampling.
- e. All VOC emissions are considered to be styrene and methyl methacrylate which are Hazardous Air Pollutants (HAPs) as defined in Section 112(b) of the Clean Air Act.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR Part 63, Subpart HHHHH, including the following sections:

63.8000(a), (b)(2)	General requirements
63.8005(a)(1)	Requirements for portable process vessels

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

- (1) The permittee shall collect and record the following information each month for this emissions unit:
 - a. the company name of each paint batch manufactured;
 - b. the VOC emissions from each paint batch manufactured, in pounds;
 - c. the total VOC emissions from all paint batches manufactured, in tons per month [summation of d)(1)b. x ton/2000 lbs]; and
 - d. the annual, year to date VOC emissions all paint batches manufactured, in tons [summation of d)(1)c. for each month to date from January to December].
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.1 to 6 inches of water.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- a. a description of the corrective action;
- b. the date corrective action was completed;
- c. the date and time the deviation ended;
- d. the total period of time (in minutes) during which there was a deviation;
- e. the pressure drop readings immediately after the corrective action was implemented; and
- f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northwest District Office. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (4) The permittee shall comply with the applicable monitoring and/or recordkeeping requirements under 40 CFR Part 63, Subpart HHHHH, including the following sections:

63.8080(a),(c)	Recordkeeping requirements
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e) Reporting Requirements

- (1) The permittee shall submit semi-annual reports and such other notifications and reports to the Ohio EPA Northwest District Office as are required in 40 CFR Part 63, Subpart HHHHH, pursuant to the following sections:

63.8070(b)(1)	Initial notification of an existing facility
63.8075(a)	Requirement of compliance reports.
63.8075(b)(1)	Semiannual compliance reports.
63.8075(d)	Notification of compliance status report
63.8075(e)	Compliance reports including deviations from excess emissions and malfunctions

- (2) The permittee shall submit annual reports that summarize the total annual actual VOC emissions from this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous year.

(3) 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:

3.89 lbs/hour and 17.02 tons/year of VOC emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the following equation:

$$\text{VOC emission rate (lbs/hour)} = [\text{EF} / 2000 \text{ lbs/ton}] * [3,024 \text{ lbs/mixer}] * [2 \text{ mixers}] / [1.92 \text{ hours/mixer}];$$

where:

EF = emission factor established during stack test which is equivalent to 2.47 lbs VOC/ton of resin produced

The annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Compliance with the annual limitation shall be based on the recordkeeping requirements in d)(1) of this permit.

b. Emission Limitation:

0.56 lb/hour and 2.47 tons/yr of PM₁₀ emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the following equation:

$$\text{PM}_{10} \text{ emission rate (lbs/hour)} = [\text{EF} / 2000 \text{ lbs/ton}] * [3,024 \text{ lbs/mixer}] * [\% \text{ dry material}] * [2 \text{ mixers}] * [\text{CE}] / [1.92 \text{ hours/mixer}];$$

where:

EF = AP-42 Appendix B2 for Category 4 as required in Table B.2-1 for AP-42 section 6.4 (0.85%)

% dry material = 21.04% based on stack test results from May 31, 2012 - June 1, 2012

CE = 90% control efficiency from the use of dust collector

Compliance with the annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hours year, and dividing by 2000 lbs/ton. Therefore, provided compliance is



shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitation:

Visible PE shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be based on visible emissions evaluations conducted in accordance with OAC rule 3745-17-03(B)(1) using Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

2. P004, 10 HP MIXER, PROCESS THREE

Operations, Property and/or Equipment Description:

10 HP MIXER

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) b)(1)e., d)(4) – d)(6) and e)(1).

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)	<p>Volatile organic compound (VOC) emissions shall not exceed 0.50 pound per hour and 2.18 tons per year. [See b)(2)e.]</p> <p>Particulate matter emissions less than or equal to 10 microns in diameter (PM₁₀) shall not exceed 0.07 pound per hour and 0.32 ton per year.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).</p> <p>See b)(2)a.</p>
b.	OAC rule 3745-21-07(M)(3)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.
e.	OAC rule 3745-114	See d)(4) through d)(6) and e)(1)
f.	40 CFR, Part 63, Subpart HHHHH	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be the following:
 - i. the emissions from this emissions unit shall be vented to a baghouse whenever any one or more of the following air contaminant sources are in operation (P003, P004, P005, P007 and P008) with a minimum capture efficiency of 100% and a minimum control efficiency of 90%, for PE and PM₁₀;
 - ii. compliance with the requirements of OAC rule 3745-17-07(A); and
 - iii. compliance with the terms and conditions of this permit.
- b. This emission unit is not subject to the requirements of the rule because they do not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- c. The emission limitation established by this rule is less stringent than the emission limitation established under OAC rule 3745-31-05(A)(3).
- d. This emissions unit is not subject to this rule because it does not meet the definition of a process vessel in 40 CFR, 63.8105. Specifically, this definition requires the capacity to be greater than or equal to 250 gallons. The capacity of this emissions unit is less than 250 gallons.
- e. All VOC emissions are considered to be styrene and methyl methacrylate which are Hazardous Air Pollutants (HAPs) as defined in Section 112(b) of the Clean Air Act.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for this emissions unit:
- a. the company name of each paint batch manufactured;
 - b. the VOC emissions from each paint batch manufactured, in pounds;
 - c. the total VOC emissions from all paint batches manufactured, in tons per month [summation of d)(1)b. x ton/2000 lbs]; and
 - d. the annual, year to date VOC emissions all paint batches manufactured, in tons [summation of d)(1)c. for each month to date from January to December].

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.1 to 4 inches of water.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northwest District Office. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (4) The PTI application for these emissions units, P004, P005, P007, P008 and P009, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emission units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or “worst case” toxic contaminant:

Toxic Contaminant: styrene

TLV (mg/m³): 85.20

Maximum Hourly Emission Rate (lbs/hr): 8.63

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 1965

MAGLC (µg/m³): 2029

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

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

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the “Toxic Air Contaminant Statute”:
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s)

modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

e) Reporting Requirements

- (1) The permittee shall submit quarterly reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
- (2) The permittee shall submit annual reports that summarize the total annual actual VOC emissions from this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous year.
- (3) Unless other arrangements have been approved by the Director (the appropriate District Office or local air agency), 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:

0.50 lb/hour and 2.18 tons/year of VOC emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the following equation:



VOC emission rate (lbs/hour) = $[EF / 2000 \text{ lbs/ton}] * [504.88 \text{ lbs/mixer}] / [1.25 \text{ hours}]$;

where:

EF = emission factor established during stack test which is equivalent to 2.47 lbs VOC/ton of resin produced

The annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Compliance with the annual limitation shall be based on the recordkeeping in d)(1) of this permit.

b. Emission Limitation:

0.08 lb/hour and 0.37 ton/yr of PM₁₀ emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the following equation:

PM₁₀ emission rate (lbs/hour) = $[EF / 2000 \text{ lbs/ton}] * [504.88 \text{ lbs/mixer}] * [CE] / [1.25 \text{ hours}]$;

where:

EF = AP-42 Appendix B2 for Category 4 as required in Table B.2-1 for AP-42 section 6.4 (0.85%)

% dry material = 21.04% based on stack test results from May 31, 2012 - June 1, 2012

CE = 90% control efficiency from the use of dust collector

Compliance with the annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hours year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitation:

Visible PE shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be based on visible emissions evaluations conducted in accordance with OAC rule 3745-17-03(B)(1) using Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

3. P005, TEN-1 HP MIXERS, PROCESS FOUR

Operations, Property and/or Equipment Description:

PAIL MIXERS

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) b)(1)e., d)(4) – d)(6) and e)(1).

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)	<p>Volatile organic compound (VOC) emissions shall not exceed 0.54 pound per hour and 2.36 tons per year. [See b)(2)e.]</p> <p>Particulate matter emissions less than or equal to 10 microns in diameter (PM₁₀) shall not exceed 0.08 pound per hour and 0.34 ton per year.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).</p> <p>See b)(2)a.</p>
b.	OAC rule 3745-21-07(M)(3)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.
e.	OAC rule 3745-114	See d)(4) through d)(6) and e)(1)
f.	40 CFR, Part 63, Subpart HHHHH	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be the following:
 - i. the emissions from this emissions unit shall be vented to a baghouse whenever any one or more of the following air contaminant sources are in operation (P003, P004, P005, P007 and P008) with a minimum capture efficiency of 100% and a minimum control efficiency of 90%, for PE and PM₁₀;
 - ii. compliance with the requirements of OAC rule 3745-17-07(A); and
 - iii. compliance with the terms and conditions of this permit.
 - b. This emission unit is not subject to the requirements of the rule because they do not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
 - c. The emission limitation established by this rule is less stringent than the emission limitation established under OAC rule 3745-31-05(A)(3).
 - d. This emissions unit is not subject to this rule because it does not meet the definition of a process vessel in 40 CFR, 63.8105. Specifically, this definition requires the capacity to be greater than or equal to 250 gallons. The capacity of this emissions unit is less than 250 gallons.
 - e. All VOC emissions are considered to be styrene and methyl methacrylate which are Hazardous Air Pollutants (HAPs) as defined in Section 112(b) of the Clean Air Act.
- c) Operational Restrictions
- (1) None.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and record the following information each month for this emissions unit:
 - a. the company name of each paint batch manufactured;
 - b. the VOC emissions from each paint batch manufactured, in pounds;
 - c. the total VOC emissions from all paint batches manufactured, in tons per month [summation of d)(1)b. x ton/2000 lbs]; and
 - d. the annual, year to date VOC emissions all paint batches manufactured, in tons [summation of d)(1)c. for each month to date from January to December].
 - (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.1 to 4 inches of water.

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northwest District Office. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during

future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (4) The PTI application for these emissions units, P004, P005, P007, P008 and P009, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emission units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):
$$\text{TLV}/10 \times 8/X \times 5/Y = 4 \text{ TLV}/XY = \text{MAGLC}$$
 - d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or "worst case" toxic contaminant:

Toxic Contaminant: styrene

TLV (mg/m³): 85.20

Maximum Hourly Emission Rate (lbs/hr): 8.63

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 1965

MAGLC (µg/m³): 2029

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

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

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute":
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F);
 - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
- e) Reporting Requirements
- (1) The permittee shall submit quarterly reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
 - (2) The permittee shall submit annual reports that summarize the total annual actual VOC emissions from this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous year.
 - (3) Unless other arrangements have been approved by the Director (the appropriate District Office or local air agency), 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:
0.54 lb/hour and 2.36 tons/year of VOC emissions
Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by the following equation:
$$\text{VOC emission rate (lbs/hour)} = [\text{EF} / 2000 \text{ lbs/ton}] * [51.04 \text{ lbs/mixer}] * [10 \text{ mixers}] / [1.17 \text{ hours}];$$

where:

EF = emission factor established during stack test which is equivalent to 2.47 lbs VOC/ton of resin produced

The annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Compliance with the annual limitation shall be based on the recordkeeping in d)(1) of this permit.

b. Emission Limitation:

0.08 lb/hour and 0.34 ton/yr of PM₁₀ emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the following equation:

PM₁₀ emission rate (lbs/hour) = [EF / 2000 lbs/ton] * [51.04 lbs/mixer] * [CE] * [10 mixers] / [1.17 hours];

where:

EF = AP-42 Appendix B2 for Category 4 as required in Table B.2-1 for AP-42 section 6.4 (0.85%)

% dry material = 21.04% based on stack test results from May 31, 2012 - June 1, 2012

CE = 90% control efficiency from the use of dust collector

Compliance with the annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hours year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitation:

Visible PE shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be based on visible emissions evaluations conducted in accordance with OAC rule 3745-17-03(B)(1) using Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

4. P007, 20 HP MIXER

Operations, Property and/or Equipment Description:

20 HP MIXER

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) b)(1)g., d)(4) – d)(6) and e)(1).

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), as effective June 30, 2008	Install a baghouse with a minimum of 100% capture and 90% control efficiency of particulate matter emissions less than or equal to 10 microns in diameter (PM ₁₀). See b)(2)a. below
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to VOC and PM ₁₀ emissions from this air contaminant source since the potential to emit is less than 10 tons/yr. See b)(2)b. below.
c.	OAC rule 3745-31-05(F)	Volatile organic compound (VOC) emissions shall not exceed 0.50 pound per hour and 2.18 tons per year. [See b)(2)g.] Particulate matter emissions less than or equal to 10 microns in diameter (PM ₁₀) shall not exceed 0.07 pound per hour and 0.32 ton per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). See b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-21-07(M)(3)	See b)(2)d.
e.	OAC rule 3745-17-11(B)	See b)(2)e.
f.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.
g.	OAC rule 3745-114	See d)(4) through d)(6) and e)(1)
h.	40 CFR, Part 63, Subpart HHHHH	See b)(2)f.

(2) Additional Terms and Conditions

- a. This BAT emissions limit applies until US EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 TPY BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once US EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 TPY BAT exemption) into the Ohio SIP.
- c. This permit establishes the following legally and practically enforceable emission limitations for the purpose of limiting potential to emit (PTE). The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the following:
 - i. the emissions from this emissions unit shall be vented to a baghouse whenever any one or more of the following air contaminant sources are in operation (P003, P004, P005, P007 and P008) with a minimum capture efficiency of 100% and a minimum control efficiency of 90%, for PE and PM₁₀;
 - ii. compliance with the requirements of OAC rule 3745-17-07(A); and
 - iii. compliance with the terms and conditions of this permit.
- d. This emission unit is not subject to the requirements of the rule because they do not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- e. The emission limitation established by this rule is less stringent than the emission limitation established under OAC rule 3745-31-05(A)(3).
- f. This emissions unit is not subject to this rule because it does not meet the definition of a process vessel in 40 CFR, 63.8105. Specifically, this definition requires the capacity to be greater than or equal to 250 gallons. The capacity of this emissions unit is less than 250 gallons.

- g. All VOC emissions are considered to be styrene and methyl methacrylate which are Hazardous Air Pollutants (HAPs) as defined in Section 112(b) of the Clean Air Act.
- c) Operational Restrictions
 - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall collect and record the following information each month for this emissions unit:
 - a. the company name of each paint batch manufactured;
 - b. the VOC emissions from each paint batch manufactured, in pounds;
 - c. the total VOC emissions from all paint batches manufactured, in tons per month [summation of d)(1)b. x ton/2000 lbs]; and
 - d. the annual, year to date VOC emissions all paint batches manufactured, in tons [summation of d)(1)c. for each month to date from January to December].
 - (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.1 to 4 inches of water.
 - (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northwest District Office. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (4) The PTI application for these emissions units, P004, P005, P007, P008 and P009, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emission units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
 - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented

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

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

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

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

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or "worst case" toxic contaminant:

Toxic Contaminant: styrene

TLV (mg/m³): 85.20

Maximum Hourly Emission Rate (lbs/hr): 8.63

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 1965

MAGLC (µg/m³): 2029

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

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

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

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit(s), or the

exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

- (2) The permittee shall submit annual reports that summarize the total annual actual VOC emissions from this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous year.
- (3) Unless other arrangements have been approved by the Director (the appropriate District Office or local air agency), 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:

0.50 lb/hour and 2.18 tons/year of VOC emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the following equation:

VOC emission rate (lbs/hour) = $[EF / 2000 \text{ lbs/ton}] * [504.88 \text{ lbs/mixer}] / [1.25 \text{ hours}]$;

where:

EF = emission factor established during stack test which is equivalent to 2.47 lbs VOC/ton of resin produced

The annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Compliance with the annual limitation shall be based on the recordkeeping in d)(1) of this permit.

b. Emission Limitation:

0.08 lb/hour and 0.37 ton/yr of PM₁₀ emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the following equation:

PM₁₀ emission rate (lbs/hour) = $[EF / 2000 \text{ lbs/ton}] * [504.88 \text{ lbs/mixer}] * [CE] / [1.25 \text{ hours}]$;

where:

EF = AP-42 Appendix B2 for Category 4 as required in Table B.2-1 for AP-42 section 6.4 (0.85%)



% dry material = 21.04% based on stack test results from May 31, 2012 - June 1, 2012

CE = 90% control efficiency from the use of dust collector

Compliance with the annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hours year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitation:

Visible PE shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be based on visible emissions evaluations conducted in accordance with OAC rule 3745-17-03(B)(1) using Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

5. P008, 4.02 hp mixer

Operations, Property and/or Equipment Description:

4.02 horsepower mixer

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) b)(1)e., d)(4) – d)(6) and e)(1).

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)	<p>Volatile organic compound (VOC) emissions shall not exceed 0.58 pound per hour and 2.53 tons per year. [See b)(2)e.]</p> <p>Particulate matter emissions less than or equal to 10 microns in diameter (PM₁₀) shall not exceed 0.08 pound per hour and 0.37 ton per year.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).</p> <p>See b)(2)a.</p>
b.	OAC rule 3745-21-07(M)(3)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)c.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.
e.	OAC rule 3745-114	See d)(4) through d)(6) and e)(1)
f.	40 CFR, Part 63, Subpart HHHHH	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be the following:
 - i. the emissions from this emissions unit shall be vented to a baghouse whenever any one or more of the following air contaminant sources are in operation (P003, P004, P005, P007 and P008) with a minimum capture efficiency of 100% and a minimum control efficiency of 90%, for PE and PM₁₀;
 - ii. compliance with the requirements of OAC rule 3745-17-07(A); and
 - iii. compliance with the terms and conditions of this permit.
- b. This emission unit is not subject to the requirements of the rule because they do not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
- c. The emission limitation established by this rule is less stringent than the emission limitation established under OAC rule 3745-31-05(A)(3).
- d. This emissions unit is not subject to this rule because it does not meet the definition of a process vessel in 40 CFR, 63.8105. Specifically, this definition requires the capacity to be greater than or equal to 250 gallons. The capacity of this emissions unit is less than 250 gallons.
- e. All VOC emissions are considered to be styrene and methyl methacrylate which are Hazardous Air Pollutants (HAPs) as defined in Section 112(b) of the Clean Air Act.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for this emissions unit:
 - a. the company name of each paint batch manufactured;
 - b. the VOC emissions from each paint batch manufactured, in pounds;
 - c. the total VOC emissions from all paint batches manufactured, in tons per month [summation of d)(1)b. x ton/2000 lbs]; and
 - d. the annual, year to date VOC emissions all paint batches manufactured, in tons [summation of d)(1)c. for each month to date from January to December].

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.1 to 4 inches of water.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northwest District Office. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (4) The PTI application for these emissions units, P004, P005, P007, P008 and P009, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emission units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or “worst case” toxic contaminant:

Toxic Contaminant: styrene

TLV (mg/m³): 85.20

Maximum Hourly Emission Rate (lbs/hr): 8.63

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 1965

MAGLC (µg/m³): 2029

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

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

- (6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the “Toxic Air Contaminant Statute”:
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s)

modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

- b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

e) Reporting Requirements

- (1) The permittee shall submit quarterly reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
- (2) The permittee shall submit annual reports that summarize the total annual actual VOC emissions from this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous year.
- (3) Unless other arrangements have been approved by the Director (the appropriate District Office or local air agency), 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:

0.58 lb/hour and 2.53 tons/year of VOC emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the following equation:



VOC emission rate (lbs/hour) = $[EF / 2000 \text{ lbs/ton}] * [504.88 \text{ lbs/mixer}] / [1.08 \text{ hours}]$;

where:

EF = emission factor established during stack test which is equivalent to 2.47 lbs VOC/ton of resin produced

The annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Compliance with the annual limitation shall be based on the recordkeeping in d)(1) of this permit.

b. Emission Limitation:

0.07 lb/hour and 0.32 ton/yr of PM₁₀ emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the following equation:

PM₁₀ emission rate (lbs/hour) = $[EF / 2000 \text{ lbs/ton}] * [504.88 \text{ lbs/mixer}] * [CE] / [1.08 \text{ hours}]$;

where:

EF = AP-42 Appendix B2 for Category 4 as required in Table B.2-1 for AP-42 section 6.4 (0.85%)

% dry material = 21.04% based on stack test results from May 31, 2012 - June 1, 2012

CE = 90% control efficiency from the use of dust collector

Compliance with the annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hours year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitation:

Visible PE shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be based on visible emissions evaluations conducted in accordance with OAC rule 3745-17-03(B)(1) using Method 9 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

6. P009, Styrene Cleaning Operations

Operations, Property and/or Equipment Description:

Styrene Cleaning Operations

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) b)(1)c., d)(2) – d)(4) and e)(1).

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)	Volatile organic compound (VOC) emissions shall not exceed 1058 pounds per month and 6.35 tons per year. See b)(2)a.
b.	OAC rule 3745-21-07(M)(3)	See b)(2)b.
c.	OAC rule 3745-114	See d)(2) through d)(4) and e)(1)

(2) Additional Terms and Conditions

a. All VOC emissions are considered to be styrene which is a Hazardous Air Pollutant (HAP) as defined in Section 112(b) of the Clean Air Act.

b. This emission unit is not subject to the requirements of the rule because they do not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. volume of the process vessels cleaned each month; and

b. total number of cleanouts for each size of process vessel per month.

(2) The PTI application for these emissions units, P004, P005, P007, P008 and P009, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emission units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants or "worst case" toxic contaminant:

Toxic Contaminant: styrene

TLV (mg/m³): 85.20

Maximum Hourly Emission Rate (lbs/hr): 8.63

Predicted 1-Hour Maximum Ground-Level Concentration ($\mu\text{g}/\text{m}^3$): 1965

MAGLC ($\mu\text{g}/\text{m}^3$): 2029

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

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

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

initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

e) Reporting Requirements

- (1) The permittee shall submit quarterly reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.
- (2) The permittee shall submit annual reports that summarize the total annual actual VOC emissions from this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous year.
- (3) Unless other arrangements have been approved by the Director (the appropriate District Office or local air agency), 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:

1058 lbs/month and 6.35 tons/year of VOC emissions

Applicable Compliance Method:

Compliance with the monthly emission limitation shall be determined by the recordkeeping specified in d)(1) and by the following equation:

VOC emission rate (lbs/month) = [Size of the Process vessel (gallons) x number of cleanouts per month] x Styrene Vapor Specific Gravity x Air Density (lb/gallon);

where:

Styrene Vapor Density = 3.6

Air Density = 1.0223×10^{-2} lb/gallon

The annual limitation was developed by multiplying the lbs/month allowable mass emissions rate by the maximum operating schedule of 12 months per year, and



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dividing by 2000 lbs/ton. Compliance with the annual limitation shall be based on the recordkeeping in d)(1) of this permit.

- g) Miscellaneous Requirements
 - (1) None.

7. P801, Equipment Leaks

Operations, Property and/or Equipment Description:

Equipment Leaks

- 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)	Volatile organic compound (VOC) emissions shall not exceed 2.00 tons per year. [See b)(2)c.] The requirements of this rule also include compliance with the requirements of 40 CFR, Part 63, Subparts UU and HHHHH.
b.	40 CFR, Part 63, Subpart HHHHH. [40 CFR 63.7980-63.8105] [In accordance with 40 CFR 63.8015(a), this emissions unit are equipment leaks at an existing miscellaneous coating manufacturing operation subject to the emissions limitations/control measures specified in this section.]	See b)(2)a.
c.	40 CFR, Part 63, Subpart R	See b)(2)b.
d.	40 CFR, Part 63.1 through 63.15 [40 CFR 63.8095]	Table 10 to Subpart HHHHH of 40 CFR, Part 63 – Applicability of General Provisions to Subpart HHHHH shows which parts of the General Provisions in 40 CFR 63.1-15 apply.

- (2) Additional Terms and Conditions
 - a. The permittee shall comply with this rule by complying with the requirements of 40 CFR, Subpart UU, except as specified in 40 CFR 63.8105(c) and (d) [See Table 3 - #1.c.].
 - b. Comply with the requirements in 40 CFR 63.424(a) through (d) and 63.428(e), (f), and (h)(4), except as specified in 40 CFR 63.8015(b).
 - c. All VOC emissions are considered to be styrene and methyl methacrylate which are Hazardous Air Pollutants (HAPs) as defined in Section 112(b) of the Clean Air Act.
- c) Operational Restrictions
 - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) See 40 CFR Part 63, Subpart R (40 CFR 63.424-428).
- e) Reporting Requirements
 - (1) See 40 CFR Part 63, Subpart R (40 CFR 63.424-428).
- 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:
2.00 tons/year of VOC emissions
Applicable Compliance Method:
Compliance with the annual emission limitations shall be determined by calculating the emission factors, number of sources and the control efficiencies as expressed in the PTI application.
- g) Miscellaneous Requirements
 - (1) None.

8. Emissions Unit Group - Mixers subject to MACT: P002 and P006

EU ID	Operations, Property and/or Equipment Description
P002	100 HP MIXER
P006	60 HP MIXER

- 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)	<p>The combined VOC emissions after the use of a thermal oxidizer as control for emission units P002 and P006 shall not exceed 1.28 pounds per hour and 5.59 tons per year. [See b)(2)e.]</p> <p>Combustion emissions from the thermal oxidizer that controls VOC emissions in P002 and P006 are:</p> <p>Particulate matter emissions less than or equal to 10 microns diameter in size (PM₁₀) shall not exceed 7.10 pounds per hour and 31.11 tons per year from P002 and P006.</p> <p>Nitrogen oxide (NO_x) emissions shall not exceed 0.98 pound per day and 4.29 tons per year.</p> <p>Carbon monoxide (CO) emissions shall not exceed 0.82 pound per hour and 3.61 tons per year.</p> <p>See b)(2)a.</p>
b.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)	See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-21-07(M)(3)	See b)(2)c.
e.	40 CFR, Part 63, Subpart HHHHH [40 CFR 63.7980-63.8105] [In accordance with 40 CFR 63.8005(d) this emissions unit is a portable process vessel at an existing miscellaneous coating manufacturing operation subject to the emissions limitations/control measures specified in this section]	Emission Limit(s) and Work Practice Standards [Table 3 - #2-a. and a.1.] – [See b)(2)d.]
f.	40 CFR, Part 63.1 through 63.15 [40 CFR 63.8095]	Table 10 to Subpart HHHHH of 40 CFR, Part 63 – Applicability of General Provisions to Subpart HHHHH shows which parts of the General Provisions in 40 CFR 63.1-15 apply. See c(1), d)(3) and e)(1)

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be the following:
 - i. the emissions from this emissions unit shall be vented to a thermal oxidizer whenever any one or more of the following air contaminant sources are in operation (P002 and P006) with a minimum capture efficiency of 100% and a minimum control efficiency of 75% VOC emissions;
 - ii. compliance with the requirements of OAC rule 3745-17-07(A)(1);
 - iii. compliance with the requirements of 40 CFR Part 63, Subpart HHHHH; and
 - iv. compliance with terms and conditions of this permit.
- b. The emission limitation established by this rule is less stringent than the emission limitation established under OAC rule 3745-31-05(A)(3).
- c. This emission unit is not subject to the requirements of the rule because they do not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

- d. For each stationary process vessel at an existing source, the permittee must:
 - i. Equip the vessel with a cover or lid that must be in place at all times, except for material additions and sampling; and
 - ii. Considering both capture and any combination of control (except a flare), reduce emissions of organic HAPs with a vapor pressure ≥ 0.6 kPa by > 75 percent by weight and reduce emissions of organic HAPs with a vapor pressure < 0.6 kPa by ≥ 60 percent by weight.
- e. All VOC emissions are considered to be styrene which is a Hazardous Air Pollutant (HAP) as defined in Section 112(b) of the Clean Air Act.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable operational restrictions and requirements under 40 CFR, Part 63, Subpart HHHHH, including the following sections:

63.8000(a), (b)(2)	General requirements
63.8005(a), (a)(2), (b)(2), (c), (d)	Requirements for process vessels

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each month for this emissions unit:
 - a. the company name of each paint batch manufactured;
 - b. the VOC emissions from each paint batch manufactured, in pounds;
 - c. the total VOC emissions from all paint batches manufactured, in tons per month [summation of d)(1)b. x ton/2000 lbs]; and
 - d. the annual, year to date VOC emissions all paint batches manufactured, in tons [summation of d)(1)c. for each month to date from January to December].
- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack(s) serving this emissions unit i.e, the stack(s) for the thermal oxidizer. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;

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

The observer does not have to document the exact start and end times for the visible emission incident under item d)(2)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (3) The permittee shall comply with the applicable monitoring and/or recordkeeping requirements under 40 CFR Part 63, Subpart HHHHH, including the following sections:

63.8080	Recordkeeping requirements
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e) Reporting Requirements

- (1) The permittee shall submit semi-annual reports and such other notifications and reports to the Ohio EPA Northwest District Office as are required in 40 CFR Part 63, Subpart HHHHH, pursuant to the following sections:

63.8070(b)(1)	Initial notification of an existing facility
63.8075(a)	Requirement of compliance reports.
63.8075(b)(1)	Semiannual compliance reports.
63.8075(d)	Notification of compliance status report
63.8075(e)	Compliance reports including deviations from excess emissions and malfunctions

- (2) The permittee shall submit annual reports that summarize the total annual actual VOC emissions from this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous year.
- (3) 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.

- (4) The permittee shall submit semiannual written reports that identify:
- a. all days during which any visible emissions of particulate were observed from the stack egress points (e.g., thermal oxidizer) serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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:

1.28 lbs/hour and 5.59 tons/year of VOC emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the stack testing requirements in f)(2).

Compliance with the annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hours per year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

Thermal oxidizer with a minimum capture efficiency of 100% and a minimum control efficiency of 75% of VOC emissions and reduce emissions of organic HAPs with a vapor pressure ≥ 0.6 kPa by > 75 percent by weight and reduce emissions of organic HAPs with a vapor pressure < 0.6 kPa by ≥ 60 percent by weight.

Applicable Compliance Method:

Compliance shall be demonstrated with the capture and control efficiency in accordance with the testing requirements in f)(2).

c. Emission Limitation:

7.10 lbs/hour and 31.11 tons/year of PM₁₀ emissions

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the stack testing requirements in f)(2).

Compliance with the annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hours per year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitations shall also be demonstrated.

d. Emission Limitation:

0.98 lb/hour and 4.29 tons/year of NO_x emissions

Applicable Compliance Method:

The hourly emission limitation was established by multiplying an AP-42 emission factor of 100 lbs NO_x/10⁶ standard cubic foot (scf) of natural gas (Table 1.4-1 revised 7/98) by a total heat input of 10 MMBtu/hr and dividing by a heating value of 1020 Btu/scf. If required, compliance shall be demonstrated by emission testing conducted in accordance with Methods 1-4 and 7 of 40 CFR Part 60, Subpart A.

Compliance with the annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hours per year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitations shall also be demonstrated.

e. Emission Limitation:

0.82 lb/hour and 3.61 tons/year of CO emissions

Applicable Compliance Method:

The hourly emission limitation was established by multiplying an AP-42 emission factor of 84 lbs CO/10⁶scf of natural gas (Table 1.4-1 revised 7/98) by a total heat input of 10 MMBtu/hr and dividing by a heating value of 1020 Btu/scf. If required, compliance shall be demonstrated by emission testing conducted in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Subpart A.

Compliance with the annual limitation was developed by multiplying the lbs/hour allowable mass emissions rate by the maximum operating schedule of 8760 hours per year, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitations shall also be demonstrated.

f. Emission Limitation:

Visible PE shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation above shall be based on visible emissions evaluations conducted in accordance with OAC rule 3745-17-03(B)(1) using Method 9 of 40 CFR Part 60, Appendix A.

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emissions testing shall be conducted no later than 180 days after issuance of this permit without prior approval from the Ohio EPA, Northwest District Office.
 - b. The emission testing shall be conducted to demonstrate compliance with the hourly VOC limitation of 1.28 pounds, PM₁₀ limitation of 7.10 pounds and the overall VOC capture and control efficiency of the thermal oxidizer limitation of 0.82 pound as well as the overall HAP control efficiency of the thermal oxidizer.
 - c. The following test method(s) shall be employed to demonstrate compliance with the above emission limitations and verify emission factors:
 - i. Methods 1 - 4 of 40 CFR, Part 60, Appendix A;
 - ii. For VOC, Method 18, 25 and/or 25A of 40 CFR, Part 60, Appendix A;
 - iii. For PM₁₀, Methods 201, 201A and 202 of 40 CFR, Part 51, Appendix M; and
 - iv. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency", dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)
 - v. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.
 - d. The tests shall be conducted while this emissions unit is operating at its maximum capacity and producing highest-emitting material, unless otherwise specified or approved by the Ohio EPA, Division of Air Pollution Control. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Division of Air Pollution Control. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such



notification for review and approval prior to the tests may result in the Ohio EPA Northwest District Office's refusal to accept the results of the emissions tests.

- e. Personnel from the Ohio EPA Northwest District Office shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions unit and/or the performance of the control equipment. A comprehensive written report on the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Division of Air Pollution Control within 30 days following completion of the tests.

- (3) The permittee shall comply with the applicable compliance procedures and performance test methods as required under 40 CFR, Part 63, Subpart HHHHH, including the following sections:

63.8000(d)(1)	Requirements for performance tests
63.8005(d)	Initial compliance
63.8005(e)	Establishing operating limits
63.8005(f)	Averaging periods
63.8005(g)	Flow indicators

g) Miscellaneous Requirements

- (1) None.