



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

5/1/2013

Certified Mail

Facility ID: 0744000173
Permit Number: P0091298
County: Lawrence

Gale Bradley
Americas Styrenics
925 County Road 1A
Ironton, OH 45638

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is a final Ohio Environmental Protection Agency (EPA) Air Pollution Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it 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 Title V permit 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/dapc/permitsurvey.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 regarding this permit, please contact the Portsmouth City Health Dept., Air Pollution Unit as indicated on page one of your permit.

Sincerely,



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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Portsmouth City Health Dept., Air Pollution Unit



FINAL

**Division of Air Pollution Control
Title V Permit
for
Americas Styrenics**

Facility ID:	0744000173
Permit Number:	P0091298
Permit Type:	Renewal
Issued:	5/1/2013
Effective:	5/22/2013
Expiration:	5/22/2018



Division of Air Pollution Control
Title V Permit
for
Americas Styrenics

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Final Title V Permit
Americas Styrenics
Permit Number: P0091298
Facility ID: 0744000173
Effective Date: 5/22/2013

Authorization

Facility ID: 0744000173
Facility Description:
Application Number(s): A0022669, A0022670, A0040607
Permit Number: P0091298
Permit Description: Title V renewal permit for a polystyrene production facility.
Permit Type: Renewal
Issue Date: 5/1/2013
Effective Date: 5/22/2013
Expiration Date: 5/22/2018
Superseded Permit Number:

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

Americas Styrenics
925 County Road
1A
Ironton, OH 45638

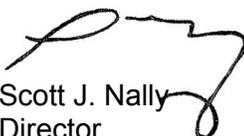
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Portsmouth City Health Dept., Air Pollution Unit
605 Washington Street
3rd Floor
Portsmouth, OH 45662
(740)353-5156

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director



Final Title V Permit
Americas Styrenics
Permit Number: P0091298
Facility ID: 0744000173
Effective Date: 5/22/2013

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

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

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))



c) The permittee shall submit required reports in the following manner:

- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

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

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

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

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

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

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

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive



measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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

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

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

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

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

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



insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

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

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

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

- (4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Portsmouth City Health Dept., Air Pollution Unit.

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

3. Scheduled Maintenance

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

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

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:



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

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

5. Title IV Provisions

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

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

6. Severability Clause

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

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

7. General Requirements

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the



Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

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

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

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

9. Marketable Permit Programs

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

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

10. Reasonably Anticipated Operating Scenarios

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



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

11. Reopening for Cause

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

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

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

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

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

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.



- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. An identification of each term or condition of this permit that is the basis of the certification.
 - b. The permittee's current compliance status.
 - c. Whether compliance was continuous or intermittent.
 - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.



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

14. Permit Shield

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

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

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

16. Emergencies

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

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

17. Off-Permit Changes

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



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

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

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

18. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

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

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

20. Permit to Install Requirement

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

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



21. Air Pollution Nuisance

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

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

22. Permanent Shutdown of an Emissions Unit

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

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

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

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

23. Title VI Provisions

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

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

(Authority for term: OAC rule 3745-77-01(H)(11))



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

The permittee shall submit required reports in the following manner:

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

25. Records Retention Requirements Under State Law Only

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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



27. Scheduled Maintenance/Malfunction Reporting

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

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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

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

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

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

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



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Americas Styrenics
Permit Number: P0091298
Facility ID: 0744000173
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B. Facility-Wide Terms and Conditions



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

a) None.

2. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart JJJ, National Emissions Standards for Hazardous Air Pollutant Emissions – Group IV Polymers and Resins. The complete MACT requirements including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District office or local air agency.

EU ID	Operations, Property and/or Equipment Description
B010	9.0 MMBtu/hr natural gas, no. 2 fuel oil and byproduct fuel fired boiler
B020	9.0 MMBtu/hr natural gas, no. 2 fuel oil and byproduct fuel fired boiler
P002	Polystyrene Polymerization Process – Train #1
P010	Polystyrene Polymerization Process – Train #2

The permittee shall also comply with all applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 1 of 40 CFR Part 63, Subpart JJJ. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart JJJ and Subpart A.

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

- B006 – natural gas fired space heater (OAC rule 3745-17-10);
- B014 – rail car/wash drying air heater (permit to install 07-288);
- B015 – 9 mmBtu/hr natural gas fired boiler (permit to install 07-299); and
- P011 – 2000 kw emergency generator – Caterpillar 3516B-TA (OAC rule 3745-31-03, PBR issued 6/11/09).

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



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C. Emissions Unit Terms and Conditions



1. B010, Dowtherm Boiler R-1

Operations, Property and/or Equipment Description:

Dowtherm Boiler R-1 - 9.0 mm/Btu natural gas, no. 2 fuel oil and byproduct fuel-fired boiler.

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) (PTI P0107189 as issued 11/23/2010)	Particulate emissions (PE) shall not exceed 0.18 pound per hour and 0.79 ton per year. Nitrogen oxide (NO _x) emissions shall not exceed 2.73 pounds per hour and 11.96 tons per year. Sulfur dioxide (SO ₂) emissions shall not exceed 3.66 pounds per hour and 16.05 tons per year. Volatile organic compounds (VOC) emissions shall not exceed 0.047 pound per hour and 0.21 ton per year. Carbon monoxide (CO) emissions shall not exceed 0.9 pound per hour and 3.94 tons per year. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07, 3745-17-10, 3745-18-06 and 40 CFR Part 63, Subpart JJJ. See b)(2)a through b)(2)e.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		the rule.
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.
d.	OAC rule 3745-18-06(B)	See b)(2)b.
e.	40 CFR Part 63, Subpart JJJ (40 CFR Part 63.1313 – 63.1335)	See b)(2)c and b)(2)d.
f.	40 CFR Part 63, Subpart A (40 CFR Part 63.1 - 63.16)	The general provisions that apply are specified in Table 1 of 40 CFR Part 63, Subpart JJJ.

(2) Additional Terms and Conditions

- a. Compliance with the terms and conditions of PTI P0107189 and this permit will satisfy the Best Available Technology requirements for this source.
- b. Fuel burning equipment which have heat input capacities equal to or less than 10 mmBtu/hr rated capacity are exempt from OAC rule 3745-18-06(D), (F) and (G).
- c. This emissions unit is used as a control device for emissions units P002 (Polystyrene Polymerization Process - Train #1) and P010 (Polystyrene Polymerization Process Train #2). Emissions units P002 and P010 are subject to the requirements of 40 CFR Part 63, Subpart JJJ. Because this emissions unit is used as a control device, it is also subject to the requirements of 40 CFR Part 63, Subpart JJJ.
- d. The permittee shall reduce emissions from emissions units P002 and P010 process vents, as defined in 40 CFR 63.1312, by 98 weight percent or to a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent. If the permittee elects to comply with the 20 ppmv standard, the concentration shall include a correction to 3 percent oxygen only when supplemental combustion air is used to combust the emissions. Compliance shall be based on either organic HAP or TOC.
- e. The company has demonstrated that sulfur content is negligible in byproduct fuel. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance.

c) Operational Restrictions

- (1) No. 2 fuel oil shall be burned for emergency backup only when natural gas is unavailable.
[Authority for term: PTI P0107189 and OAC rule 3745-77-07(A)(1)]
- (2) No. 2 fuel oil shall have a sulfur content of less than or equal to 0.4 percent, by weight.
[Authority for term: PTI P0107189 and OAC rule 3745-77-07(A)(1)]



- (3) The amount of fuel burned in this emissions unit shall not exceed 50% / 50% mix of natural gas (or no. 2 fuel oil as emergency backup) and byproduct fuel. This 50% byproduct fuel equates to 228 lbs/hr of byproduct waste fuel.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(A)(1)]

- (4) The no. 2 fuel oil shall have a sulfur content and heat content that meets the allowable SO₂ emission limitation of 3.66 pounds per hour.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(A)(1)]

- (5) If a boiler or heater is used to comply with the percent reduction requirement or concentration limit specified in b)(2)d above, then the vent stream shall be introduced into the flame zone of such a device.

[Authority for term: PTI P0107189, 40 CFR Part 63, Subpart JJJ and OAC rule 3745-77-07(A)(1)]

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

- (1) The permittee shall maintain daily records of the quantity of each fuel burned in this emissions unit, including the ratio of the mix of byproduct waste fuel to natural gas (or no. 2 fuel oil as emergency backup).

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

a. **Alternative 1:**

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. **Alternative 2:**

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall



maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emission unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

If the weekly checks show emissions that are representative of normal operation for 1 operating quarter, the required frequency of visible emission checks may be reduced to biweekly (once every two weeks, when the emissions unit is in operation). If a subsequent check by the permittee or an Ohio EPA inspector indicates emissions that are not representative of normal operation, the frequency of emission checks shall revert back to weekly until such time as there is 1 operating quarter of normal visible emissions.



[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart JJJ, including the following sections:

63.1317 and 63.1319(a)	If using a control device, comply with the applicable monitoring and record keeping provisions in 63.1315(a), except that references to group determinations (i.e., total resource effectiveness) do not apply and owners or operators are not required to comply with 63.113.
63.1315(a)	Comply with the requirements of 63.113 through 63.118
63.114	Monitoring requirements
63.117 and 63.118	Record keeping requirements
63.1331	Equipment leak provisions
63.1335	General record keeping provisions

[Authority for term: 40 CFR Part 63, Subpart JJJ]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the byproduct waste fuel usage limitation described in c)(3).

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all times when a shipment of oil is received which exceeds the 0.4 percent, by weight, sulfurcontent limitation.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the 3.66 lbs/hr SO₂ emission limitation based on the calculationsrequired in d)(2) for no. 2 fuel oil.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit semiannual written reports that identify:
- a. all days during which any visible particulate emissions were observed from thestack 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 Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall comply with the applicable reporting required under 40 CFR Part 63, Subpart JJJ, including the following sections:

63.1320(a)	If using a control device, comply with the applicable reporting provisions in 63.1315(a), except that references to group determinations (i.e., total resource effectiveness) do not apply and owners or operators are not required to comply with 63.113.
63.1315(a)	Comply with the requirements of 63.113 through 63.118
63.117 and 63.118	Reporting requirements
63.1331	Equipment leak provisions
63.1335	General reporting provisions

[Authority for term: 40 CFR Part 63, Subpart JJJ]

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:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

- b. Emission Limitation:

VOC emissions shall not exceed 0.047 pound per hour and 0.21 ton per year.



Applicable Compliance Method:

Compliance may be demonstrated by multiplying the VOC emission factor in lb/mmscf of fuel fired by the maximum quantity of fuel burned per hour, in mmscf. The VOC emission factor shall be calculated from the results of the most recent stack test which demonstrated compliance.

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 18.

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.047lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

c. Emission Limitation:

NO_x emissions shall not exceed 2.73 pounds per hour and 11.96 tons per year.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the NO_x emission factor in lb/mmscf of fuel fired by the maximum quantity of fuel burned per hour, in mmscf. The NO_x emission factor shall be calculated from the results of the most recent stack test that demonstrated compliance.

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

The tpy emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (2.73lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

d. Emission Limitation:

PE shall not exceed 0.18 pound per hour and 0.79 ton per year.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the PE factor in lb/mmscf of fuel fired by the maximum quantity of fuel burned per hour, in mmscf. The PE factor shall be calculated from the results of the most recent stack test that demonstrated compliance.

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.



The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.18lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

e. Emission Limitation:

CO emissions shall not exceed 0.9 pound per hour and 3.94 tons per year.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the CO emission factor in lb/mmscf of fuel fired by the maximum quantity of fuel burned per hour, in mmscf. The CO emission factor shall be calculated from the results of the most recent stack test which demonstrated compliance.

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

The tpy emission limitation was developed by multiplying the short-term allowable CO emission limitation (0.9lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

f. Emission Limitation:

SO₂ emissions shall not exceed 3.66 pounds per hour and 16.05 tons per year.

Applicable Compliance Method:

Compliance may be demonstrated based upon the records required in d) above and by multiplying the SO₂ emission factor in lb/1000 gal of fuel fired by the maximum quantity of fuel burned per hour, in gallons. The SO₂ emission factor shall be obtained from AP-42, Volume 1, 5th Edition, Chapter 1, Section 1.3, Table 1.3-1, dated September, 1998 and the sulfur content of the fuel.

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6.

The tpy emission limitation was developed by multiplying the short-term allowable SO₂ emission limitation (3.66lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

g. Emission Limitation:



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Reduce emissions from process vents by 98 weight percent or to a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Method 18.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- g) Miscellaneous Requirements
 - (1) None.



2. B020, Dowtherm Boiler R-3

Operations, Property and/or Equipment Description:

Dowtherm Boiler R-3 - 9.0 mm/Btu natural gas, no. 2 fuel oil and byproduct fuel-fired boiler.

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) (PTI P0107189 as issued 11/23/2010)	Particulate emissions (PE) shall not exceed 0.18 pound per hour and 0.79 ton per year. Nitrogen oxide (NO _x) emissions shall not exceed 2.73 pounds per hour and 11.96 tons per year. Sulfur dioxide (SO ₂) emissions shall not exceed 3.66 pounds per hour and 16.05 tons per year. Volatile organic compounds (VOC) emissions shall not exceed 0.047 pound per hour and 0.21 ton per year. Carbon monoxide (CO) emissions shall not exceed 0.9 pound per hour and 3.94 tons per year. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07, 3745-17-10, 3745-18-06 and 40 CFR Part 63, Subpart JJJ. See b)(2)a through b)(2)e.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		the rule.
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.
d.	OAC rule 3745-18-06(B)	See b)(2)b.
e.	40 CFR Part 63, Subpart JJJ (40 CFR Part 63.1313 – 63.1335)	See b)(2)c and b)(2)d.
f.	40 CFR Part 63, Subpart A (40 CFR Part 63.1 - 63.16)	The general provisions that apply are specified in Table 1 of 40 CFR Part 63, Subpart JJJ.

(2) Additional Terms and Conditions

- a. Compliance with the terms and conditions of PTI P0107189 and this permit will satisfy the Best Available Technology requirements for this source.
- b. Fuel burning equipment which have heat input capacities equal to or less than 10 mmBtu/hr rated capacity are exempt from OAC rule 3745-18-06(D), (F) and (G).
- c. This emissions unit is used as a control device for emissions units P002 (Polystyrene Polymerization Process - Train #1) and P010 (Polystyrene Polymerization Process Train #2). Emissions units P002 and P010 are subject to the requirements of 40 CFR Part 63, Subpart JJJ. Because this emissions unit is used as a control device, it is also subject to the requirements of 40 CFR Part 63, Subpart JJJ.
- d. The permittee shall reduce emissions from emissions units P002 and P010 process vents, as defined in 40 CFR 63.1312, by 98 weight percent or to a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent. If the permittee elects to comply with the 20 ppmv standard, the concentration shall include a correction to 3 percent oxygen only when supplemental combustion air is used to combust the emissions. Compliance shall be based on either organic HAP or TOC.
- e. The company has demonstrated that sulfur content is negligible in byproduct fuel. Therefore, it is not necessary to develop monitoring, record keeping and/or reporting requirements to ensure compliance.

c) Operational Restrictions

- (1) No. 2 fuel oil shall be burned for emergency backup only when natural gas is unavailable.
[Authority for term: PTI P0107189 and OAC rule 3745-77-07(A)(1)]
- (2) No. 2 fuel oil shall have a sulfur content of less than or equal to 0.4 percent, by weight.
[Authority for term: PTI P0107189 and OAC rule 3745-77-07(A)(1)]



- (3) The amount of fuel burned in this emissions unit shall not exceed 50% / 50% mix of natural gas (or no. 2 fuel oil as emergency backup) and byproduct fuel. This 50% byproduct fuel equates to 228 lbs/hr of byproduct waste fuel.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(A)(1)]

- (4) The no. 2 fuel oil shall have a sulfur content and heat content that meets the allowable SO₂ emission limitation of 3.66 pounds per hour.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(A)(1)]

- (5) If a boiler or heater is used to comply with the percent reduction requirement or concentration limit specified in b)(2)d above, then the vent stream shall be introduced into the flame zone of such a device.

[Authority for term: PTI P0107189, 40 CFR Part 63, Subpart JJJ and OAC rule 3745-77-07(A)(1)]

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

- (1) The permittee shall maintain daily records of the quantity of each fuel burned in this emissions unit, including the ratio of the mix of byproduct waste fuel to natural gas (or no. 2 fuel oil as emergency backup).

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

a. **Alternative 1:**

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. **Alternative 2:**

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall



maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emission unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

If the weekly checks show emissions that are representative of normal operation for 1 operating quarter, the required frequency of visible emission checks may be reduced to biweekly (once every two weeks, when the emissions unit is in operation). If a subsequent check by the permittee or an Ohio EPA inspector indicates emissions that are not representative of normal operation, the frequency of emission checks shall revert back to weekly until such time as there is 1 operating quarter of normal visible emissions.



[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart JJJ, including the following sections:

63.1317 and 63.1319(a)	If using a control device, comply with the applicable monitoring and record keeping provisions in 63.1315(a), except that references to group determinations (i.e., total resource effectiveness) do not apply and owners or operators are not required to comply with 63.113.
63.1315(a)	Comply with the requirements of 63.113 through 63.118
63.114	Monitoring requirements
63.117 and 63.118	Record keeping requirements
63.1331	Equipment leak provisions
63.1335	General record keeping provisions

[Authority for term: 40 CFR Part 63, Subpart JJJ]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the byproduct waste fuel usage limitation described in c)(3).

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all times when a shipment of oil is received which exceeds the 0.4 percent, by weight, sulfurcontent limitation.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the 3.66 lbs/hr SO₂ emission limitation based on the calculationsrequired in d)(2) for no. 2 fuel oil.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit semiannual written reports that identify:
- a. all days during which any visible particulate emissions were observed from thestack 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 Portsmouth Local Air Agency by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall comply with the applicable reporting required under 40 CFR Part 63, Subpart JJJ, including the following sections:

63.1320(a)	If using a control device, comply with the applicable reporting provisions in 63.1315(a), except that references to group determinations (i.e., total resource effectiveness) do not apply and owners or operators are not required to comply with 63.113.
63.1315(a)	Comply with the requirements of 63.113 through 63.118
63.117 and 63.118	Reporting requirements
63.1331	Equipment leak provisions
63.1335	General reporting provisions

[Authority for term: 40 CFR Part 63, Subpart JJJ]

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:

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

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

- b. Emission Limitation:

VOC emissions shall not exceed 0.047 pound per hour and 0.21 ton per year.



Applicable Compliance Method:

Compliance shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in f)(2).

Ongoing compliance may be demonstrated by multiplying the VOC emission factor in lb/mmscf of fuel fired by the maximum quantity of fuel burned per hour, in mmscf. The VOC emission factor shall be calculated from the results of the most recent stack test which demonstrated compliance.

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.047lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

c. Emission Limitation:

NO_x emissions shall not exceed 2.73 pounds per hour and 11.96 tons per year.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the NO_x emission factor in lb/mmscf of fuel fired by the maximum quantity of fuel burned per hour, in mmscf. The NO_x emission factor shall be calculated from the results of the most recent stack test that demonstrated compliance.

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

The tpy emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (2.73lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

d. Emission Limitation:

PE shall not exceed 0.18 pound per hour and 0.79 ton per year.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the PE factor in lb/mmscf of fuel fired by the maximum quantity of fuel burned per hour, in mmscf. The PE factor shall be calculated from the results of the most recent stack test that demonstrated compliance.

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.



The tpy emission limitation was developed by multiplying the short-term allowable PE limitation (0.18lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

e. Emission Limitation:

CO emissions shall not exceed 0.9 pound per hour and 3.94 tons per year.

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the CO emission factor in lb/mmscf of fuel fired by the maximum quantity of fuel burned per hour, in mmscf. The CO emission factor shall be calculated from the results of the most recent stack test which demonstrated compliance.

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

The tpy emission limitation was developed by multiplying the short-term allowable CO emission limitation (0.9lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.

f. Emission Limitation:

SO₂ emissions shall not exceed 3.66 pounds per hour and 16.05 tons per year.

Applicable Compliance Method:

Compliance may be demonstrated based upon the records required in d) above and by multiplying the SO₂ emission factor in lb/1000 gal of fuel fired by the maximum quantity of fuel burned per hour, in gallons. The SO₂ emission factor shall be obtained from AP-42, Volume 1, 5th Edition, Chapter 1, Section 1.3, Table 1.3-1, dated September, 1998 and the sulfur content of the fuel.

If required, compliance shall be demonstrated based upon the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6.

The tpy emission limitation was developed by multiplying the short-term allowable SO₂ emission limitation (3.66lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.



g. Emission Limitation:

Reduce emissions from process vents by 98 weight percent or to a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent

Applicable Compliance Method:

Compliance shall be demonstrated based upon an emission test performed in accordance with the methods and procedures specified in f)(2).

[Authority for term: PTI P0107189 and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 12 months after issuance of this permit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emissions rate(s) for VOC and the 98% or 20 ppmv destruction rate efficiency.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):for VOC mass emissions rates and for 98% or 20 ppmv destruction rate efficiency, Method 18 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- d. The test(s) shall be conducted at worst case representative conditions while burning a byproduct fuel/ other fuel mix as described in section c)(3) above, unless otherwise approved by the Portsmouth Local Air Agency. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Portsmouth Local Air Agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Portsmouth Local Air Agency's to accept the results of the emission test(s).
- f. Personnel from the Portsmouth Local Air Agency shall be permitted to witness the test(s), 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 from the emissions unit and/or the performance of the control equipment.



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- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Portsmouth Local Air Agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Portsmouth Local Air Agency.

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

g) Miscellaneous Requirements

- (1) None.



3. P002, Polystyrene Polymerization Process - Train #1

Operations, Property and/or Equipment Description:

Polystyrene Polymerization Process Train #1 - vented to dowtherm boilers R-1 (B010) and R-3 (B020).

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) (PTI P0107186 as issued 1/7/2011)	Volatile organic compounds (VOC) emissions shall not exceed 0.06 pound per hour and 0.26 ton per year. See b)(2)b and b)(2)c.
b.	OAC rule 3745-21-09(DD)	The leak detection and repair (LDAR) program specified by this applicable rule is equivalent to or less stringent than the LDAR program specified by 40 CFR Part 63, Subpart JJJ.
c.	OAC rule 3745-21-09(CC)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 63, Subpart JJJ (40 CFR Part 63.1313 - 63.1335)	See b)(2)a.
e.	40 CFR Part 63, Subpart A (40 CFR Part 63.1 - 63.16)	The general provisions that apply are specified in Table 1 of 40 CFR Part 63, Subpart JJJ.

(2) Additional Terms and Conditions

a. The permittee of an affected emissions unit producing polystyrene resin using a continuous process shall comply with the requirements of this rule by reducing emissions from all process vents, as defined in 40 CFR 63.1312, by 98 weight percent or to a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent. If the permittee elects to comply with the



20ppmv standard, the concentration shall include a correction to 3 percent oxygen only when supplemental combustion air is used to combust the emissions. Compliance shall be based on either organic HAP or TOC.

- b. Compliance with 40 CFR Part 63, Subpart JJJ shall satisfy the best available technology (BAT) requirement for this emissions unit.
- c. Process emissions from this emissions unit shall be vented to the dowtherm boilers R-1 (B010) and R-3 (B020). There shall be no increase in the allowable emissions from the dowtherm boilers.

c) Operational Restrictions

- (1) If a boiler or heater is used to comply with the percent reduction requirement or concentration limit specified in b)(2)a above, then the vent stream shall be introduced into the flame zone of such a device.

[Authority for term: PTI P0107186 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain daily records, in pounds, of the amount of each raw material used in this process unit and the hourly VOC emissions from this emissions unit.

[Authority for term: PTI P0107186 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart JJJ, including the following sections:

63.1317 and 63.1319(a)	If using a control device, comply with the applicable monitoring and record keeping provisions in 63.1315(a), except that references to group determinations (i.e., total resource effectiveness) do not apply and owners or operators are not required to comply with 63.113.
63.1315(a)	Comply with the requirements of 63.113 through 63.118
63.114	Monitoring requirements
63.117 and 63.118	Record keeping requirements
63.1331	Equipment leak provisions
63.1335	General record keeping provisions

[Authority for term: 40 CFR Part 63, Subpart JJJ]



e) Reporting Requirements

- (1) The permittee shall comply with the applicable reporting required under 40 CFR Part 63, Subpart JJJ, including the following sections:

63.1320(a)	If using a control device, comply with the applicable reporting provisions in 63.1315(a), except that references to group determinations (i.e., total resource effectiveness) do not apply and owners or operators are not required to comply with 63.113.
63.1315(a)	Comply with the requirements of 63.113 through 63.118
63.117 and 63.118	Reporting requirements
63.1331	Equipment leak provisions
63.1335	General reporting provisions

[Authority for term: 40 CFR Part 63, Subpart JJJ]

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:

VOC emissions shall not exceed 0.06 pound per hour and 0.26 ton per year.

Applicable Compliance Method:

Compliance with the pounds per hour limitation shall be demonstrated based upon the most recent version of the emissions tracking program, approved by the Portsmouth Local Air Agency, and used to calculate emissions from this emission unit. This program shall include calculations using monitoring and record keeping as described in section d) of this permit and shall be based on emission factors from Compilation of Air Pollutant Emission Factors AP-42, Fifth Edition, Volume I, Chapters 6 (Organic Chemical Processes) and 7 (Liquid Storage Tanks) and/or other appropriate factors to calculate emissions rates from this emissions unit. This program shall be available to an OEPA representative at any time during normal business hours.

The tpy emission limitation was developed by multiplying the short-term allowable VOC emission limitation (0.06lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance is demonstrated with the annual emission limitation.



b. Emission Limitation:

Reduce emissions from all process vents by 98 weight percent or to a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent.

Applicable Compliance Method:

Compliance shall be demonstrated based on compliance with 40 CFR Part 63, Subpart JJJ for the Dowtherm boilers R-1 and R-3 (B010 and B020) in accordance with C.1.f)(1)g and C.2.f)(2) of this permit.

[Authority for term: PTI P0107186 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



4. P010, Polystyrene Polymerization Process - Train #2

Operations, Property and/or Equipment Description:

Polystyrene Polymerization Process Train #2 - vented to dowtherm boilers R-1 (B010) and R-3 (B020).

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) (PTI P0107188, as issued 1/7/2011)	There shall be no visible particulate emissions from the rework filter receiver ME-710, transfer system and screening operation. See b)(2)b and b)(2)c.
b.	OAC rule 3745-21-09(DD)	The leak detection and repair (LDAR) program specified by this applicable rule is equivalent to or less stringent than the LDAR program specified by 40 CFR Part 63, Subpart JJJ.
c.	OAC rule 3745-21-09(CC)	The permittee shall not discharge into the ambient air any volatile organic compounds(VOC) emissions from the material recovery section in excess of 0.12 pound ofVOC per 1000 pounds of product produced.
d.	40 CFR Part 63, Subpart JJJ (40 CFR Part 63.1313 - 63.1335)	See b)(2)a.
e.	40 CFR Part 63, Subpart A (40 CFR Part 63.1 - 63.16)	The general provisions that apply are specified in Table 1 of 40 CFR Part 63, Subpart JJJ.

(2) Additional Terms and Conditions

a. The permittee of an affected emissions unit producing polystyrene resin using a continuous process shall comply with the requirements of this rule by



reducing emissions from all process vents, as defined in 40 CFR 63.1312, by 98 weight percent or to a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent. If the permittee elects to comply with the 20ppmv standard, the concentration shall include a correction to 3 percent oxygen only when supplemental combustion air is used to combust the emissions. Compliance shall be based on either organic HAP or TOC.

- b. Compliance with 40 CFR Part 63, Subpart JJJ shall satisfy the best available technology (BAT) requirement for this emissions unit.
- c. Process emissions from this emissions unit shall be vented to the Dowtherm boilers R-1 (B010) and R-3 (B020). There shall be no increase in the allowable emissions from the Dowtherm boilers.

c) Operational Restrictions

- (1) If a boiler or heater is used to comply with the percent reduction requirement or concentration limit specified in b)(2)a above, then the vent stream shall be introduced into the flame zone of such a device.

[Authority for term: PTI P0107188 and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain daily records, in pounds, of the amount of each raw material used in this process unit and the hourly VOC emissions from this emissions unit.

[Authority for term: PTI P0107188 and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall comply with the applicable monitoring and record keeping required under 40 CFR Part 63, Subpart JJJ, including the following sections:

63.1317 and 63.1319(a)	If using a control device, comply with the applicable monitoring and record keeping provisions in 63.1315(a), except that references to group determinations (i.e., total resource effectiveness) do not apply and owners or operators are not required to comply with 63.113.
63.1315(a)	Comply with the requirements of 63.113 through 63.118
63.114	Monitoring requirements
63.117 and 63.118	Record keeping requirements
63.1331	Equipment leak provisions
63.1335	General record keeping provisions



[Authority for term: 40 CFR Part 63, Subpart JJJ]

e) Reporting Requirements

- (1) The permittee shall comply with the applicable reporting required under 40 CFR Part 63, Subpart JJJ, including the following sections:

63.1320(a)	If using a control device, comply with the applicable reporting provisions in 63.1315(a), except that references to group determinations (i.e., total resource effectiveness) do not apply and owners or operators are not required to comply with 63.113.
63.1315(a)	Comply with the requirements of 63.113 through 63.118
63.117 and 63.118	Reporting requirements
63.1331	Equipment leak provisions
63.1335	General reporting provisions

[Authority for term: 40 CFR Part 63, Subpart JJJ]

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:

The permittee shall not discharge into the ambient air any VOC emissions from the material recovery section in excess of 0.12 pound ofVOC per 1000 pounds of product produced.

Applicable Compliance Method:

Compliance with the pounds VOC per 1000 pounds of product limitation shall be demonstrated based upon the most recent version of the emissions tracking program, approved by the Portsmouth Local Air Agency, and used to calculate emissions from this emission unit. This program shall include calculations using monitoring and record keeping as described in section d) of this permit and shall be based on emission factors from Compilation of Air Pollutant Emission Factors AP-42, Fifth Edition, Volume I, Chapters 6 (Organic Chemical Processes) and 7 (Liquid Storage Tanks) and/or other appropriate factors to calculate emissions rates from this emissions unit. This program shall be available to an OEPA representative at any time during normal business hours.



b. Emission Limitation:

Reduce emissions from all process vents by 98 weight percent or to a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent.

Applicable Compliance Method:

Compliance shall be demonstrated based on compliance with 40 CFR Part 63, Subpart JJJ for the Dowtherm boilers R-1 and R-3 (B010 and B020) in accordance with C.1.f)(1)g and C.2.f)(2) of this permit.

c. Emission Limitation:

There shall be no visible particulate emissions from the rework filter receiver ME-710, transfer system and screening operation.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22.

[Authority for term: PTI P0107188 and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



5. Emissions Unit Group -styrene tanks: T004,T005,

EU ID	Operations, Property and/or Equipment Description
T004	Marine Styrene Storage Tank B-1 (Styron TM) - 750,000 gallons fixed roof storage tank (formerly Dow Hanging Rock, tank was constructed in 1969 and permitted in 1984, "moved to Americas Styrenics 05/08)
T005	Marine Styrene Storage Tank B-2 (Styron TM) - 750,000 gallons fixed roof storage tank (formerly Dow Hanging Rock, tank was constructed in 1969 and permitted in 1984, "moved to Americas Styrenics 05/08)

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.	None	None
		See b)(2)a.

(2) Additional Terms and Conditions

a. The provisions of 40 CFR Part 63, Subpart JJJ do not apply to storage vessels containing styrene at existing affected sources as stated in 40 CFR 63.1314(d).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.



Final Title V Permit
Americas Styrenics
Permit Number: P0091298
Facility ID: 0744000173
Effective Date:5/22/2013

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. None.

g) Miscellaneous Requirements

(1) None.