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

3/5/2013

Certified Mail

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

Mr. Steve Steinpreis
Plymouth Foam Inc
1800 Sunset Drive
Plymouth, WI 53073

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0679000327
Permit Number: P0111032
Permit Type: OAC Chapter 3745-31 Modification
County: Tuscarawas

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Times-Reporter. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically 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. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *-Via E-Mail Notification*
Ohio EPA-SEDO; Pennsylvania; West Virginia

Tuscarawas County

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install
Plymouth Foam Inc

Issue Date:	3/5/2013
Permit Number:	P0111032
Permit Type:	OAC Chapter 3745-31 Modification
Permit Description:	Modification of an existing EPS foam process to allow the installation of four new shape mold presses without increasing overall throughput of the process; includes updates to the federally enforceable restrictions to avoid classification of facility as a major stationary source and removal of annual pentane retention testing requirement
Facility ID:	0679000327
Facility Location:	Plymouth Foam Inc One Southern Gateway, Gnadenhutten, OH 44629
Facility Description:	Polystyrene Foam Product Manufacturing

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: http://epa.ohio.gov/dapc/permitsonline.aspx by entering the permit # or: Kimbra Reinbold, Ohio EPA DAPC, Southeast District Office, 2195 Front Street, Logan, OH 43138. Ph: (740)385-8501

Permit Strategy Write-Up

1. Check all that apply:

   XSynthetic Minor Determination

   Netting Determination

2. Source Description:

   Plymouth Foam is an expandable polystyrene (EPS) foam molding facility located at One Southern Gateway in Gnadenhutten, Ohio. This modified PTI is for Chapter 31 modification of the process to allow installation of four new shape molds without increasing the overall throughput of the process. PTI #P0104190 was issued on March 5, 2009, for the EPS foam processing equipment (emissions units P001 – P007, but in the modified PTI, the entire process was consolidated under one EU ID (P001). The facility-wide restrictions on organic compound (OC) emissions include OC emissions from emissions unit P008 (laminating line) permitted in PTI No. 06-08313 issued on October 4, 2007, which is not affected by this action, as well as all de minimis and exempt fuel-burning sources (EUs B001, B002, B004-B012) that emit OCs.

3. Facility Emissions and Attainment Status:

   This facility is in Tuscarawas County which is in attainment/unclassifiable for all criteria pollutants. In the original PTI for the EPS foam process, the company obtained a restriction on OC emissions of 249.0 tons per rolling, 12-month period covering emissions units P001-P008 to avoid being a major stationary source subject to PSD review per OAC rule 3745-31-01(LLL). In the modified PTI issued in 2009, the restricted level was increased to 249.7 tons to account for OC emissions from the de minimis and exempt fuel-burning sources that were not included in the original operating restriction. This modified permit includes a federally enforceable facility-wide limit of 249.0 tons per rolling, 12-month period from all emissions units at the facility, which will allow the company to continue to avoid PSD requirements even after the new shape molds are installed.

4. Source Emissions:

   This permit authorizes OC emissions from the EPS foam process (emissions unit P001) of up to 200 tons of OC per year, after which Plymouth Foam is required to control the OC emissions with a regenerative thermal oxidizer (RTO) with a minimum 86.5% capture and 98% destruction efficiency. However, total OC emissions from the facility are being limited to 249.0 tons per rolling, 12-month period.Styrene, a hazardous air pollutant (HAP), is also emitted from the EPS foam process, but compliance with the facility-wide restrictions on OC emissions ensures that HAP emissions from the facility remain below major source levels.

5. Conclusion:

   The operational restrictions, emissions limits, monitoring and record keeping requirements in this permit are sufficient to limit the potential to emit for this facility below the PSD major source threshold of 250 tons per year. The facility-wide, federally enforceable OC limit of 249.0 tons per rolling, 12-month period ensures that the federal PSD rules do not apply to this facility or to this modification.

6. Please provide additional notes or comments as necessary:

   None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

Pollutant	Tons Per Year
VOC	249.0
HAP (individual and total)	3.66

DRAFT

Division of Air Pollution Control
Permit-to-Install
for
Plymouth Foam Inc

Facility ID:	0679000327
Permit Number:	P0111032
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	3/5/2013
Effective:	To be entered upon final issuance

Division of Air Pollution Control
Permit-to-Install
for
Plymouth Foam Inc

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 7
9. Reporting Requirements 7
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 9
14. Public Disclosure 9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 10
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10

Authorization

Facility ID:	0679000327
Facility Description:	EPS foam plant
Application Number(s):	A0045581
Permit Number:	P0111032
Permit Description:	Modification of an existing EPS foam process to allow the installation of four new shape mold presses without increasing overall throughput of the process; includes updates to the federally enforceable restrictions to avoid classification of facility as a major stationary source and removal of annual pentane retention testing requirement
Permit Type:	OAC Chapter 3745-31 Modification
Permit Fee:	$500.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date:	3/5/2013
Effective Date:	To be entered upon final issuance

This document constitutes issuance to:

Plymouth Foam Inc
One Southern Gateway
Gnadenhutten, OH 44629

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

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

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0111032
Permit Description: Modification of an existing EPS foam process to allow the installation of four new shape mold presses without increasing overall throughput of the process; includes updates to the federally enforceable restrictions to avoid classification of facility as a major stationary source and removal of annual pentane retention testing requirement

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

Emissions Unit ID:	**P001**
Company Equipment ID:	P001
Superseded Permit Number:	P0104190
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

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

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

3. General Requirements

a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

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

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Southeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, andreportingrequirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Southeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

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

b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

c) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

d) The permittee shall submit progress reports to the Ohio EPA DAPC, Southeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have

been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southeast District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (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.)

10. Applicability

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

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

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

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

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as “permanently shut down” in Ohio EPA’s “Air Services” along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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

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

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

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

a) Completion of initial installation date shall be enteredupon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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

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. Applicable Emissions Limitations and/or Control Requirements

   a)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
(1)	OAC rule 3745-31-05(D) (Synthetic minor restriction to avoid PSD requirements)	Organic compound (OC) emissions from all sources at the facility (emissions units B001, B002, B004-B012, P001 and P008) shall not exceed249.0 tons per rolling, 12-month period. See 3.a)-c) below.

3. Operational Restrictions

   a) The maximum material usage for emissions units P001 and P008, combined, shall not cause OC emissions to exceed 247.56 tons as a rolling, 12-month summation based on the following equations:

      (1) For emissions unit P001:

         a. Monthly uncontrolled emissions:

$$X_{UC} = \sum_{i=1}^{n} W \times OC \times 1 \text{ ton}/2{,}000 \text{ lbs}$$

Where:

X_{UC} = tons of OC emissions per month from the uncontrolled EPS foam process;
W=weight of each type of bead processed in the pre-expander, in pounds;
OC= raw material OC content for type of bead, as a weight fraction, as documented by the manufacturer; and
n = number of bead types processed; or

Monthly controlled emissions:

When required, until testing of the regenerative thermal oxidizer (RTO) is performed, capture efficiency will be estimated at 86.5% based on tests of a similar installation, and control efficiency will be estimated at 98% based on the design specification. The initial calculation is shown below:

$$X_C = [(X_{UC} \times 0.865 \times (1-0.98)) + (X_{UC} \times (1-0.865)]$$

Where:

X_C = tons of OC emissions per month from the controlled EPS foam process.

After testing of the RTO is performed, the capture and control efficiencies determined during the most recent performance test shall be used to calculate OC emissions from EU P001 to determine compliance with the facility-wide OC emissions limitation.

(2) For emissions unit P008:

Y = daily OC emissions from laminating (as determined using the equation in Part III.A.V.1.a of PTI # 06-08313 issued on October 4, 2007) X 365 days/year X 1 ton/2,000 lbs

Where:

Y = tons of OC emissions per year from laminating

b) Potential OC emissions from deminimis and exempt sources at the facility (EUs B001, B002, and B004-B012) are 1.44 tons of OC per year, combined, determined by using the following equation based on the emission factor in AP-42 Section 1.4 (7/98):

Z = 11 lbs OC/million CF x 1 CF/1,020 mmBTU x 30.49 million BTU/hr x 8,760 hrs/yr x 1 ton/2,000 pounds
= 1.44 tons/year

c) Total facility-wide OC emissions:

(1) $\sum_{i=1}^{N} (X_{UC} \text{ or } X_C) + Y + Z \leq 249.0$ tons of OC, as a rolling, 12-month summation

Where:

N = months in the rolling, 12-month period.

The permittee has existing records that are sufficient to demonstrate compliance with the rolling, 12-month emissions limitation upon issuance of this permit.

d) The styrene content of any material processed in emissions unit P001 shall not exceed 0.1%, by weight.

4. Monitoring and /or Recordkeeping Requirements

a) The permittee shall maintain monthly records of the following:

(1) identification of each lot of beads processed;

(2) pounds of EPS beads in each lot processed by the pre-expander;

(3) the OC content of EPS beads in each lot processed by the pre-expander, in weight percent;

(4) total OC emissions, in tons;

(5) total OC emissions from all coatings and cleanup materials used in the laminating line (emissions unit P008);

(6) total facility OC emissions for the rolling, 12-month period, including emissions from de minimis and exempt sources and emissions unitP008; and

(7) the styrene content of EPS beads in each lot processed by the pre-expander, in weight percent.

5. Reporting Requirements

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

b) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitation for OC in 2.a)(1) or the styrene content limitation in 3.d). The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

6. Testing Requirements

a) Compliance with the emission limitation established in 2.a)(1) of this permit shall be determined in accordance with the following methods:

Emissions Limitation:
Organic compounds (OC) emissions from the facility shall not exceed 249.0 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance with the rolling, 12-month emissions limitation for OC shall be demonstrated by the information collected pursuant to the recordkeeping requirements in 4.a) of this permit.

6. Miscellaneous Requirements

a) In addition to limiting the facility-wide potential to emit for VOC emissions, the operational restriction in 3.d) above has the practical effect of limiting emissions of hazardous air pollutants (HAPs) from the facility to below the major source thresholds of 10 TPY (highest individual HAP) and 25 TPY (total HAPs). Therefore, additional monitoring, recordkeeping or reporting requirements are not necessary to ensure that the major source thresholds for individual and total HAPs are not exceeded.

C. Emissions Unit Terms and Conditions

1. P001, EPS Foam Process

Operations, Property and/or Equipment Description:

Expandable polystyrene (EPS) foam line consisting of one 3,000 lbs/hr pre-expander, 84,000 cubic feet of aging bag capacity, one 3,000 lbs/hrIdro block molding machine, one 1,000 lbs/hrDingeldein block molding machine, two 150 lbs/hr Kurtz shape molding machines, two 120 lbs/hrBerndorf shape molding machines and 4,540 lbs/hr of equipment capacity for cutting and storage of EPS block and finished product; after total OC emissions from EPS bead processing at the facility exceed 200 tons per rolling, 12-month average, emissions (except for storage emissions) must be controlled by a regenerative thermal oxidizer (RTO); Chapter 31 modification to add four shape molds to process without increasing overall throughput of process and administrative modification to consolidate the process under one emissions unit ID and update applicable requirements; supersedes PTI No. P0104190 issued on March 5, 2009, for EUs P001-P007

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) d)(5)-(8) and e)(5)

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.	ORC 3704.03(T)	Uncontrolled organic compounds (OC) emissions shall not exceed 200.0 tons per rolling, 12-month period; or After actual uncontrolled OC emissions from this emissions unit exceed 200.0 tons per rolling, 12-month period, OC emissions, except OC emissions from storage of molded EPS foam products, shall be controlled with a regenerative thermal oxidizer (RTO) with a capture efficiency of at least 86.5% and a destruction efficiency of at least 98%, by weight. See c)(1) below.
b.	OAC rule 3745-31-05(D)	See Section B.2.a)(1).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Synthetic minor to avoid PSD review	

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) Except for OC emissions from the storage of molded EPS foam products, OC emissions from emissions unit P001shall be captured and vented to an RTO within 12 months after the actual OC emissions from this emissions unit exceed 200.0 tons per rolling, 12-month period, and thereafter. Capture efficiency shall be at least 86.5% and destruction efficiency of the RTO shall be at least 98%, by weight, as determined by the testing required in f)(2) of this permit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following:

a. identification of each lot of beads processed;

b. pounds of EPS beads in each lot processed by the pre-expander;

c. the OC content of EPS beads in each lot processed by the pre-expander, in weight percent;

d. the total OC emissions, in tons; and

e. the rolling, 12-month summation of the total OC emissions i.e., the summation of the total OC emissions, as recorded in “d” above, for the present month plus the previous 11 months of operation, in tons.

(2) When applicable, in order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions unit(s) was/were in compliance. Until compliance testing has been conducted, the thermal oxidizer shall be operated and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manual.

(3) When applicable, the permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within + 1 percent of the

temperature being measured or + 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. The permittee shall collect and calculate the average combustion temperature within the thermal oxidizer, each of the eight, 3-hour blocks of time during each day of operation, and shall record and maintain the following information each day:

a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions unit(s) was/were in compliance; and

b. a log of the downtime for the capture (collection) system, thermal oxidizer, and monitoring equipment when the associated emissions unit(s) was/were in operation.

(4) When applicable**,** whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range/limit specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

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

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

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

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA

District Office or local air agency. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future emission tests that demonstrate compliance with the allowable OC emission rate for the controlled emissions unit(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(5) The permit-to-install (PTI) modification application for emissions unit P001 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust systems, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

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

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year):

Toxic Contaminant: Styrene

TLV (mg/m^3): 85.2

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground Level Concentration (ug/m^3): 493.61

MAGLC (ug/m^3): 2,029

The permittee has demonstrated that emissions of styrene from emissions unit P001 is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(6) Prior to making any physical changes to or changes in the method of operation of the emissions units, that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

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

(8) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

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

(2) The permittee shall submit a summary of the total OC emissions for each calendar year, including calculations, to the Ohio EPA, Southeast District Office. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

(3) When RTO use is required, the permittee shall submit quarterly summaries that identify all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit(s) was/were in compliance and/or any records of downtime for the capture (collection) system, the thermal oxidizer, or the

monitoring equipment when the emissions unit(s) was/were in operation. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

(4) When RTO use is required, the permittee shall submit quarterly reports that identify the following information concerning the operation of the thermal oxidizer during the operation of the emissions unit(s):

a. each period of time when the average combustion temperature within the thermal oxidizer was outside of the acceptable range;

b. an identification of each incident of deviation described in d)(1) above where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in d)(1) where prompt corrective action, that would bring the temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in d)(1) where proper records were not maintained for the investigation and/or the corrective action(s).

These quarterly 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.

(5) The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. If no changes to the emissions unit(s) or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

f) Testing Requirements

(1) Compliance with the emissions limitations and/or control requirements specified in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitations:
Uncontrolled OC emissions shall not exceed 200.0 tons per rolling, 12-month period; or,
After actual uncontrolled OC emissions from this emissions unit exceed 200.0 tons per rolling, 12-month period, OC emissions, except OC emissions from storage of molded EPS foam products, shall be controlled with a regenerative thermal oxidizer (RTO) with a capture efficiency of at least 86.5% and a destruction efficiency of at least 98%, by weight.

Applicable Compliance Methods:
Compliance with the uncontrolled emissions limitation shall be demonstrated by the recordkeeping in d)(1). When required, compliance with the required capture and control efficiencies shall be demonstrated by the performance testing in f)(2).

(2) When RTO use is required, the permittee shall conduct, or have conducted, emission testing for emissions units P001 in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months after start-up of the RTO.

b. The emission testing shall be conducted to determine overall capture efficiency for P001 (excluding storage areas) and destruction efficiency for the RTO.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable capture and control efficiencies:

The destruction efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

The capture efficiency shall be determined as the difference between the calculated total OC released from raw bead used, as determined per d)(1) and the OC measured at the inlet of the RTO.

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

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Southeast District Office. 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 Ohio EPA Southeast District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA Southeast District Office 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.

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 Ohio EPA Southeast District Office 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 Ohio EPA Southeast District Office.

g) Miscellaneous Requirements

(1) None.