State of Ohio Environmental Protection Agency

STREET ADDRESS:
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50 W. Town St., Suite 700
Columbus, Ohio 43215

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P.O. Box 1049
Columbus, OH 43216-1049

11/5/2008

Certified Mail

Yes	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED

CHERYL L L BARTA
ACO POLYMER PRODUCTS
PO BOX 245
CHARDON, OH 44024

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0228000138
Permit Number: P0103708
Permit Type: Initial Installation
County: Geauga

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate 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 comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Plain Dealer. A copy of the public notice and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control Web page http://www.epa.state.oh.us/dapc in Microsoft Word and Adobe Acrobat format. 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
122 South Front Street
Columbus, Ohio 43215

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087

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 and operate 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 and Operate is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171.

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-NEDO; Pennsylvania; Canada

Permit Strategy Write-Up

1. Check all that apply:

   _X_ Synthetic Minor Determination

   ___ Netting Determination

2. Source Description:

   ACO Polymer Products, Inc. (ACO) is a manufacturer of polymer concreter parts. The facility currently has two production lines, an automatic extrusion line (P001) and a manually operated extrusion line (P003). Both lines make polymer concreter parts by extruding a mixture of stone aggregate and polymer resin containing styrene into molds. Styrene is emitted at a constant rate during mold filling (pouring) and at a rate proportional to the open surface area of the part during curing.

   Molds must be coated before each use in mold release stations MR–1 (P004) and MR–2 (P005) with wax containing liquid and paste mold release agent (VOC only, no HAP and no air toxics).

   The facility also has 3 storage silos for aggregates (T001), a 8,000 gallons polyester resin storage tank (Z001), and a 2 MM BTU per hour gas - fired boiler (Z002).

3. Facility Emissions and Attainment Status:

   ACO is located at 12080 Ravenna Road, Munson, Geauga County, an area designated as "non-attainment" for ozone, and "attainment" for sulfur dioxide, $PM_{2.5}$, carbon monoxide and lead. The facility will not be a “Major Source” for a single hazardous air pollutant (styrene), based upon the synthetic minor restriction of VOC (styrene) emissions from emissions units P001 and P003 combined. Therefore, MACT and Title V requirements will not apply to them.

4. Source Emissions:

   Styrene, a hazardous air pollutant, is emitted from emissions units P001, P003, and T001. The maximum potential to emit of styrene from emissions unit T001 is less than 0.10 ton per year. No HAP(s) are emitted from other emissions units. This FEPTIO will contain terms and conditions that require no more than 9.80 tons per year of VOC (styrene) emissions from emissions units P001 and P003 combined. Therefore, the maximum facility-wide total styrene emissions will be less than 10 tons per year. ACO is required by this permit to track VOC (styrene) emissions, keep records, and submit reports.

5. Conclusion:

   The emission limits contained in this FEPTIO are adequate to provide federally enforceable limitations to ensure that the applicable MACT and Title V thresholds will not be exceeded.

6. Please provide additional notes or comments as necessary:

   ACO has also requested to restrict OC emissions from emissions units P004 and P005 combined to 39.0 tons per year. With total OC emissions from emissions units P001, P003, and T001 combined less than 9.90 tons per year, and 0.10 ton per year of OC emissions from emissions unit Z001, the facility-wide OC emissions will be less than 50 tons per year.

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

Pollutant	Tons Per Year
VOC (Styrene)	9.80
VOC	48.80

Geauga County

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
ACO POLYMER PRODUCTS

Issue Date: 11/5/2008
Permit Number: P0103708
Permit Type: Initial Installation
Permit Description: Two extrusion process lines, one automated and one manually operated line, and two mold release stations.
Facility ID: 0228000138
Facility Location: ACO POLYMER PRODUCTS
12080 RAVENNA RD,
CHARDON, OH 44024
Facility Description: Other Concrete Product Manufacturing

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Tracy Gu at Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road or (330)425-9171. The permit can be downloaded from the Web page: www.epa.state.oh.us/dapc

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

DRAFT

Air Pollution Permit-to-Install and Operate
for
ACO POLYMER PRODUCTS

Facility ID: 0228000138
Permit Number: P0103708
Permit Type: Initial Installation
Issued: 11/5/2008
Effective: To be entered upon final issuance
Expiration: To be entered upon final issuance

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install and Operate
for
ACO POLYMER PRODUCTS

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Authorization

Facility ID: 0228000138
Application Number(s): A0035656
Permit Number: P0103708
Permit Description: Two extrusion process lines, one automated and one manually operated line, and two mold release stations.
Permit Type: Initial Installation
Permit Fee: $1,600.00 *DO NOT send payment at this time - subject to change before final issuance*
Issue Date: 11/5/2008
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

ACO POLYMER PRODUCTS
12080 RAVENNA RD
CHARDON, OH 44024

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 43087
(330)425-9171

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (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 described emissions unit(s) will operate in compliance with applicable State and Federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0103708
Permit Description: Two extrusion process lines, one automated and one manually operated line, and two mold release stations.

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

Group Name: Extruder Lines

Emissions Unit ID:	**P001**
Company Equipment ID:	Basic Extruder Line #1
Superseded Permit Number:	P0084545
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P003**
Company Equipment ID:	Extruder Line #2
Superseded Permit Number:	P0084547
General Permit Category and Type:	Not Applicable

Group Name: Mold Release Stations

Emissions Unit ID:	**P004**
Company Equipment ID:	MR-1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P005**
Company Equipment ID:	MR-2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. **What does this permit-to-install and operate ("PTIO") allow me to do?**

   This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. **Who is responsible for complying with this permit?**

   The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

   The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. **What records must I keep under this permit?**

   You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. **What are my permit fees and when do I pay them?**

   There are two fees associated with permitted air contaminant sources in Ohio:

   - PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

     You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

   - Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. **When does my PTIO expire, and when do I need to submit my renewal application?**

   This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Northeast District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means 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.
You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

   a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

      (1) None.

   b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

      (1) None.

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group - Extruder Lines: P001, P003,

EU ID	Operations, Property and/or Equipment Description
P001	Extrusion line No.1 for the production of polymer concrete products
P003	Extrusion line (extrusion line #2) for the production of precast polymer concrete products

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. d)(3), d)(4), d)(5), and e)(2).

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c, b)(2)c, d)(2), e)(1)c, and f)(1)c

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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 3745-21-07(G)(2)	Organic compound (OC) (styrene) emissions from each emissions unit shall not exceed forty (40) pounds per day and eight (8) pounds per hour. See b)(2)a.
b.	OAC rule 3745-21-07(M)(3)(c)	See b)(2)b.
c.	OAC rule 3745-31-05(D)	See b)(2)c.
d.	OAC rule 3745-31-05(F)	See b)(2)d.

(2) Additional Terms and Conditions

a. Each emissions unit becomes subject to OAC 3745-21-07(G)(2) on any day when any photochemically reactive material, as defined in OAC 3745-21-01(C)(5), is employed.

The OC (styrene) emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA

approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations shall be void.

b. These emissions units are not subject to the control requirements of OAC rule 3745-21-07(M)(3)(a) and 3745-21-07(M)(3)(b), since the potential, uncontrolled organic compound (OC) emissions from each emissions unit are no more than 40 pounds per day.

c. The OC (styrene) emissions from emissions units P001 and P003, combined, shall not exceed 9.80 tons per year, based upon a rolling 12-month summation of monthly emissions.

To ensure enforceability during the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of OC (tons)
1	1.0
1-2	2.0
1-3	3.0
1-4	4.0
1-5	5.0
1-6	6.0
1-7	7.0
1-8	8.0
1-9	9.0
1-10	9.80
1-11	9.80
1-12	9.80

After the first 12 calendar months of following the issuance of this permit, compliance with the annual emission limitation for OC (styrene) shall be based upon a rolling, 12-month summation of the OC (styrene) emissions.

d. Best Available Technology (BAT) requirements under OAC rule 3745-31-05 (A)(3) is not applicable since permittee voluntary restricts OC (styrene) emissions

from emissions units P001 and P003, combined, to no more than 9.80 tons per year.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Permittee shall keep the following records daily for each of emissions units P001 and P003:

a. The total operating hours, defined as "OH", in hours;

b. The total OC (styrene) emissions from pouring operation, defined as "DP_{OC}", in pounds, shall be calculated as follows:

$DP_{OC} = (OH)(EF_p)$

where:

EF_p = emission factor, which is 0.037 pound OC per hour for emissions unit P001 and 0.046 pound OC per hour for emissions unit P003. The emission factors were developed by Environmental Compliance & Risk Management, based upon weight loss tests, conducted on April 1, 2008, by Applied Environment Consultant, Inc.;

c. The name of parts and production rate, defined as "PR", in parts per day;

d. Each parts size, defined as "S", in m^2/part;

e. The total OC (styrene) emissions from curing operation, defined as "DC_{OC}", in pounds, shall be calculated as follows:

DC_{OC} = the sum, from i = 1 to i = n of $[(PR)(S)(EF_c)/(F)]i$

where:

i = subscript denoting an individual parts processed in each emissions unit;
n = the total number of parts processed in each emissions unit;
EF_c = emission factor, which is 38.35 grams per square meter of mold open surface area. The emission factor was determined by testing, conducted on November 21, 2000, by Interplastic Corporation, Thermoset Resins Division; and
F = conversion factor, 453.593 grams per pound.

f. The total daily OC (styrene) emissions, "D_{OC}", in pounds per day, and shall be calculated as follows:

$D_{OC} = (DP_{OC} + DC_{OC})$

g. The total hourly OC (styrene) emissions, "H_{OC}", in pounds per hour, and shall be calculated as follows:

$H_{OC} = (D_{OC})/(OH)$

(2) The permittee shall keep the following information each month:

a. the monthly OC (styrene) emissions from each emissions unit of P001 and P003, in tons per month;

b. the monthly OC (styrene) emissions from emissions units P001 and P003 combined, in tons per month; and

c. the rolling, 12-month summation of total OC (styrene) emissions from emissions units P001 and P003 combined, in tons.

(3) The federally enforceable permit-to-install and operate (FEPTIO) application for these emissions units, P001 and P003, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The AToxic 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(s) 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 AReview 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(s) emitted from the emissions unit(s), (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) AThreshold 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) AThreshold 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., A**X**@ hours per day and A**Y**@ days per week, from that of 8 hours per day and 5 days per week. The resulting

calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 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) or Aworst case@ toxic contaminant(s):

Toxic Contaminant: styrene

TLV (mg/m3): 85.202

Maximum Hourly Emission Rate (lbs/hr): 16.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2,959

MAGLC (ug/m3): 9,721

The permittee, has demonstrated that emissions of styrene, from emissions units P001 and P003, 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 AToxic Air Contaminant Statute@, ORC 3704.03(F).

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

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

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

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

If the permittee determines that the AToxic 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 AToxic 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.

(5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic 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 AToxic 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 AToxic 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 AToxic 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.

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 AToxic 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) The permittee shall submit deviation (excursion) reports that include the following information for this emissions unit:

a. an identification of each day during which the average hourly OC (styrene) emissions from this emissions unit exceeded 8.0 pounds, and the actual average hourly OC (styrene) emissions for each such day;

b. an identification of each day during which the daily OC (styrene) emissions from this emissions unit exceeded 40.0 pounds, and the actual daily OC (styrene) emissions for each such day;

c. an identification of each month during which the rolling, 12-month OC (styrene) emissions from emissions units P001 and P003, combined, exceeded 9.80 tons, and the actual rolling, 12-month OC (styrene) emissions from emissions units P001 and P003 combined for each such month; and

d. for the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels [see b)(2)c].

These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

(2) 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 AToxic 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 postmar

(3) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(4) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. The OC (styrene) emissions from emissions units P001 and P003, combined, shall not exceed 9.80 tons per year, based upon a rolling 12-month summation of monthly emissions.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the Ohio EPA Northeast District Office).

f) Testing Requirements

(1) Compliance with the emission limitations in sections b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

OC (styrene) emissions from each of emissions units P001 and P003 shall not exceed 8 pounds per hour when photochemically reactive materials are employed.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section d)(1). If required, the permittee shall demonstrate compliance by emission testing in accordance with the procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25A.

b. Emission Limitation:

OC (styrene) emissions from each of emissions units P001 and P003 shall not exceed 40 pounds per day when photochemically reactive materials are employed.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section d)(1).

c. Emission Limitation:

OC (styrene) emissions from emissions units P001 and P003, combined, shall not exceed 9.80 tons per year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section d)(2).

g) Miscellaneous Requirements

(1) None.

2. Emissions Unit Group - Mold Release Stations: P004, P005,

EU ID	Operations, Property and/or Equipment Description
P004	Mold Release Station 1
P005	Mold Release Station 2

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c, b)(2)d, d)(2), e)(1), and f)(1)c

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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 3745-21-07(G)(2)	Exempt. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)	See b)(2)b and b)(2)c.
c.	OAC rule 3745-31-05(D)	See b)(2)d and b)(2)e.

(2) Additional Terms and Conditions

a. This emissions unit shall not employ organic liquids which are photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

The restriction to not employ organic liquids which are photochemically reactive materials shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, this restriction shall be void.

b. Organic compound (OC) emissions from emissions unit P004 shall not exceed 9.68 pounds per hour and 42.39 tons per year.

c. OC emissions from emissions unit P005 shall not exceed 6.45 pounds per hour and 28.25 tons per year.

d. OC emissions from emissions units P004 and P005, combined, shall not exceed 39.0 tons per year, based upon a rolling, 12-month summary of monthly emissions.

To ensure enforceability during the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Emissions of OC (tons)
1	4.0
1-2	8.0
1-3	12.0
1-4	16.0
1-5	20.0
1-6	24.0
1-7	28.0
1-8	32.0
1-9	36.0
1-10	39.0
1-11	39.0
1-12	39.0

After the first 12 calendar months of following the issuance of this permit, compliance with the annual OC emission limitation shall be based upon a rolling, 12-month summation of the OC emissions.

e. This emissions unit shall not employ mold release agents that would emit or cause the emissions of any hazardous air pollutants.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Permittee shall keep the following information monthly for each of emissions units P004 and P005:

a. Products rate, "PR", in parts per month to which mold release agent must be applied; and

b. The monthly OC emissions, defined as "E_{OC}", in tons per month. "E_{OC}" shall be calculated as follow:

E_{OC} = (PR)[(LMR)(OLMR) + (PMR)(OPMR)]/(2,000 lbs/ton)

where:

LMR = maximum liquid mold release agent need to be applied to each mold, in pound per part. LMR = 0.0658 lb/part;

OLMR = OC content in liquid mold release agent, in pound OC per pound liquid mold release agent. OLMR = 0.93 lb/lb of LMR;

PMR = maximum paste mold release agent need to be applied to each mold, in pound per part. PMR = 0.0278 lb/part; and

OPMR = OC content in paste mold release agent, in pound OC per pound paste mold release agent. OPMR = 0.70 lb/lb of PMR.

If permittee is able to reduce the mold release agents application rate per part and/or OC content of mold release agents, the new values may be used to calculate E_{OC} instead of LMR, OLMR, PMR, and OPMR values indicated in this permit.

(2) The permittee shall keep the following information each month:

a. the monthly OC emissions from emissions units P004 and P005, combined, in tons per month; and

b. the rolling, 12-month summation of total OC emissions from emissions units P004 and P005, combined.

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports that include the following information:

a. an identification of each month during which the rolling, 12-month OC emissions from emissions units P004 and P005, combined, exceeded 39.0 tons, and the actual rolling, 12-month OC emissions from emissions units P004 and P005, combined, for each such month; and

b. for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels [see b)(2)d].

These reports shall be submitted in accordance with the reporting requirements specified in the Standard Terms and Conditions of this permit.

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the Director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the Potential to Emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. OC emissions from emissions units P004 and P005, combined, shall not exceed 39.0 tons per year, based upon a rolling, 12-month summary of monthly emissions.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the director (the Ohio EPA Northeast District Office).

f) Testing Requirements

(1) Compliance with the emission limitations in sections b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

OC emissions shall not exceed 9.68 pounds per hour from emissions unit P004 and 6.45 pounds per hour from emissions unit P005.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the following equation:

H_{OC} = (HPR)[(LMR)(OLMR) + (PMR)(OPMR)]

where:

H_{OC} = Hourly OC emission rate

HPR = maximum hourly production rate (HPR = 120 parts/hr for emissions unit P004 and HPR = 80 parts/hr for emissions unit P005);

LMR = maximum liquid mold release agent needed to be applied to each mold = 0.0658 lb/part;

OLMR = OC content in liquid mold release agent = 0.93 lb/lb of LMR;

PMR = maximum paste mold release agent needed to be applied to each mold = 0.0278 lb/part; and

OPMR = OC content in paste mold release agent = 0.70 lb/lb of PMR.

b. Emission Limitation:

OC emissions shall not exceed 42.39 tons per year from emissions unit P004 and 28.25 tons per year from emissions unit P005.

Applicable Compliance Method:

The tpy emission limitations were developed by multiplying the short-term allowable emission limitations, in pounds per hour, 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 limitations, compliance shall also be shown with the annual emission limitations.

c. Emission Limitation:

OC emissions from emissions units P004 and P005, combined, shall not exceed 39.0 tons per year, as a rolling, 12-month summation of monthly emissions.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in section d)(2).

g) Miscellaneous Requirements

(1) None.