



Environmental Protection Agency

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

3/8/2011

Certified Mail

Beth Pristas  
Johnson Controls Inc.  
1147 North Washington St.  
Greenfield, OH 45123

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 0536010034  
Permit Number: P0107662  
Permit Type: Administrative Modification  
County: Highland

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Southwest District Office. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: U.S. EPA  
Ohio EPA-SWDO; Indiana; Kentucky





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install  
for  
Johnson Controls Inc.**

Facility ID:	0536010034
Permit Number:	P0107662
Permit Type:	Administrative Modification
Issued:	3/8/2011
Effective:	3/8/2011





Division of Air Pollution Control
Permit-to-Install
for
Johnson Controls Inc.

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## Authorization

Facility ID: 0536010034  
Facility Description: Automobile seating and foam manufacturer  
Application Number(s): M0001142  
Permit Number: P0107662  
Permit Description: This Administrative Modification to change air flow into incinerator to allow for the running of the lines independently of each other.  
Permit Type: Administrative Modification  
Permit Fee: \$200.00  
Issue Date: 3/8/2011  
Effective Date: 3/8/2011

This document constitutes issuance to:

Johnson Controls Inc.  
1147 North Washington St.  
Greenfield, OH 45123

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

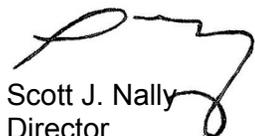
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southwest District Office  
401 East Fifth Street  
Dayton, OH 45402  
(937)285-6357

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: P0107662

Permit Description: This Administrative Modification to change air flow into incinerator to allow for the running of the lines independently of each other.

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

<b>Emissions Unit ID:</b>	<b>P005</b>
Company Equipment ID:	Foam Line 2
Superseded Permit Number:	05-14129
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P007</b>
Company Equipment ID:	Foam Line 1
Superseded Permit Number:	05-14129
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, Southwest District Office.
  - (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Southwest District Office. The written reports shall be submitted (i.e.,

postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

- (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Southwest 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, Southwest 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, Southwest 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, Southwest 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, Southwest 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 entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

**14. Public Disclosure**

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

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (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.

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



1. P005, Foam Line 2

Operations, Property and/or Equipment Description:

Polyurethane Foam Molding Line.

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

(1) b)(1)f, d)(8), d)(9), and d)(10).

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 3745-31-05(A)(3)	<p>Volatile organic compound (VOC) emissions shall not exceed 13.0 pounds per hour</p> <p>b)(2)a, below.</p> <p>Particulate emissions (PE) shall not exceed 0.5 pounds per hour or 1.3 tons per year.</p> <p>b)(2)a, below.</p> <p>Visible PE from the stack shall not exceed 10% opacity, except during clean out</p> <p>During clean out, the opacity may not exceed 20% opacity except for one six minute period in any one hour where the opacity may not exceed 60% opacity.</p> <p>c)(2), below.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).</p>
b.	OAC rule 3745-21-07(G)(2)	When coating non-metal parts, the OC emissions from the use photochemically reactive liquid organic materials or substance containing photochemically reactive material shall not exceed 8

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		pounds per hour nor 40 pounds per day or OC emissions will need to be vented to a control device and reduced by at least 85%.  b)(2)c, d)(11), e)(5), and f)(4).
c.	OAC rules 3745-17-07(A) and 3745-17-11(B)	b)(2)c, below.
d.	OAC rule 3745-31-05(D)	VOC emissions shall not exceed 41.5 tons as a rolling, 365-day summation.  c)(3) and c)(4), below..
e.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	c)(2), c)(5), d)(2), d)(6), and d)(7), below.
f.	OAC rule 3745-114-01	Ohio Toxic Rule.

(2) Additional Terms and Conditions

- a. The 13.0 lbs VOC per hour and the 0.5 lbs PE per hour limitations are established to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limits.
- b. The uncontrolled mass rate of particulate emissions (UMRE) from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table I does not apply because the facility is located in Highland County.

This emissions unit is also exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

- c. On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (G); therefore, paragraph (G) is no longer part of the State regulations. However, that rule revision has not been approved by the U.S.EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs to OAC rule 3745-21-07, the requirement of the previous OAC rule 3745-21-07(G) still exists as part of the federally approved SIP for Ohio.

Once the February 18, 2008, revised OAC rule 3745-21-07, or modified version of OAC rule 3745-21-07 is approved by the U.S. EPA and Ohio's State Implementation Plan (SIP) is revised, the terms and conditions within this permit which are required by previous OAC rule 3745-21-07(G) will not be required and will not be federally and/or state enforceable.

Once the February 18, 2008, revised OAC rule 3745-21-07, or modified version of OAC rule 3745-21-07 is approved by the U.S. EPA and Ohio's State Implementation Plan (SIP) is revised, the permittee shall take immediate steps to

assure compliance with any and all requirements of the revised OAC rule and/or SIP.

c) **Operational Restrictions**

- (1) The permittee shall not employ any liquid organic material that is a photochemically reactive material in this emissions unit. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
- (2) The VOC emissions from the spray mold release agents for this emissions unit shall be vented to a thermal incinerator with a minimum destruction efficiency of 90%, by weight, for VOC.
- (3) The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit (28 degrees Celsius) below the average temperature during the most recent emission tests that demonstrated the emissions unit was in compliance.
- (4) The maximum annual spray mold release agent usage for this emissions unit shall not exceed 118.6 tons, based upon a rolling, 365-day summation of the spray mold release usage figures. (The permittee has sufficient existing records to demonstrate compliance with this limit during the first twelve months after issuance of this permit.)
- (5) The maximum annual paste mold release agent usage for this emissions unit shall not exceed 19.5 tons, based upon a rolling, 365-day summation of the spray mold release usage figures. (The permittee has sufficient existing records to demonstrate compliance with this limit during the first twelve months after issuance of this permit.)
- (6) The air flow rate at the inlet to the thermal incinerator shall be no less than the following:
  - a. 20,560 standard cubic feet per minute (scfm), when multiple polyurethane foam molding lines, which have control requirements, are operating; and
  - b. 10,300 scfm, when an individual polyurethane foam molding line, which has control requirements, is operating.
- (7) The permittee shall operate a metal mesh filter system to control PE whenever this emissions unit is in operation.

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

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the company name and identification for each liquid organic material employed; and
  - b. documentation on whether or not each liquid organic material employed is a photochemically reactive material.

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

- (2) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit (28 degrees C) below the average temperature during the most recent emissions test that demonstrated that the emission unit was in compliance.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
- (3) The permittee shall maintain daily records of the following information for this emissions unit:
- a. the company name and identification for the spray mold release agent employed;
- b. the VOC content of the spray mold release agent employed, in % by weight;
- c. the spray mold release agent usage for each day, in pounds;
- d. the rolling, 365-day summation of spray mold release agent usage, in tons (i.e., to convert pounds to tons divide by 2000 lbs/ton);
- e. the company name and identification for the paste mold release agent employed;
- f. the VOC content of the paste mold release agent employed, in % by weight;
- g. the paste mold release agent usage for each day, in pounds; and
- h. the rolling, 365-day summation of paste mold release agent usage, in pounds or tons.

- (4) The permittee shall calculate and maintain daily records of the following for this emissions unit:

- a. the VOC emissions, in pounds, for the spray mold release agent, calculated as follows:

$$Es = (Us) \times (VOCs) \times [1 - (CE \times DE)]$$

Where:

Es = the daily VOC emission rate for the spray mold release agent, in pounds;

Us = the daily spray mold release agent usage, in pounds (from d)(3)c. above);

VOCs = the VOC content of the spray mold release agent, in %, by weight (from d)(3)b. above);

CE = the capture efficiency, as determined during the most recent compliance demonstration; and

DE = the destruction efficiency, as determined during the most recent compliance demonstration.

- b. the VOC emissions, in pounds, for the paste mold release agent, calculated as follows:

$$E_p = (U_p) \times (VOC_p)$$

Where:

$E_p$  = the daily VOC emission rate for the paste mold release agent, in pounds;

$U_p$  = the daily paste mold release agent usage, in pounds (from d)(3)g. above); and

$VOC_p$  = the VOC content of the paste mold release agent, in %, by weight (from d)(3)f, above).

- c. the total VOC emission rate, in pounds, i.e.,  $E_s + E_p$ ; and
- d. the rolling, 365-day VOC emission rate, in tons.
- (5) The permittee shall maintain records that document any time periods when the panel metal mesh filter system serving as PE control for this emissions unit was not in service while this emissions unit was operating.
- (6) The CAM plan for this emissions unit has been developed for VOC emissions through parametric monitoring of the capture and control system. The CAM performance indicators for VOC emissions include combustion temperature for destruction and air flow rate at the thermal incinerator inlet for capture. The combustion temperature indicator range for the thermal incinerator shall be any combustion temperature more than 50 degrees Fahrenheit (28 degrees Celsius) below the average temperature during the most recent emission tests that demonstrated this emissions unit was in compliance. The air flow rate at the inlet of the thermal incinerator indicator is identified in section A.II.5 for this emissions unit. The most recent compliance demonstration was used as the basis for developing the combustion temperature and air flow rate indicators. If the required monitoring demonstrates an excursion from the indicator ranges, then the permittee shall take corrective actions to restore the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (7) The permittee shall measure the air flow velocity at the inlet to the thermal incinerator with a minimum frequency of once per day while this emissions unit is in operation. The velocity measurement shall be performed in accordance with the procedures outlined in the CAM plan with any changes approved by Ohio EPA, Southwest District Office. Based upon the daily measured velocity, the permittee shall calculate the air flow rate. Units shall be in standard cubic feet per minute. The velocity measuring device shall be

capable of accurately measuring the desired parameter. The measuring device shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Parts 64.6(c) and 64.7]

- (8) The permit to install for emissions units P005 and P007 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):
- a. Pollutant: Naptha (64742-47-8)  
TLV (ug/m3): 200,000  
Maximum hourly emission rate (lbs/hr): 12.1  
Predicted 1-hour maximum ground level concentration (ug/m3): 2,056  
Maximum acceptable ground level concentration (ug/m3): 4,761
  - b. \*\*Pollutant: 2,4 TDI (584-84-9)  
TLV (ug/m3): 35.6  
Maximum hourly emission rate (lbs/hr): 0.021  
Predicted 1-hour maximum ground level concentration (ug/m3): 1.67  
Maximum acceptable ground level concentration (ug/m3): 0.848
  - c. Pollutant: Diethanol-amine (111-42-2)  
TLV (ug/m3): 2,000  
Maximum hourly emission rate (lbs/hr): 0.00032 lbs/hr  
Predicted 1-hour maximum ground level concentration (ug/m3): 0.025  
Maximum acceptable ground level concentration (ug/m3): 47.6
- (9) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters; the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change.

Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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 the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

- (10) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. a documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- (11) This facility shall maintain the following daily records if any material employed is by definition photo chemically reactive material "PRM" or contains a substance that is by definition "PRM" during any time when non-metal parts are being coated in this emissions unit and the organic compound (OC) emissions are not being vented to the control device:
  - a. if any material employed is by definition "PRM" or contains a substance that is by definition "PRM", the amount of each "PRM" material or "PRM" containing material employed while coating non-metal parts, in gallons;

- b. if any material employed is by definition "PRM" or contains a substance that is by definition "PRM", the organic compound content of each "PRM" material or "PRM" containing material employed while coating non-metal parts, in lbs/gal;
- c. if any material employed is by definition "PRM" or contains a substance that is by definition "PRM", the organic compound (OC) emissions of each "PRM" material or "PRM" containing material employed while coating non-metal parts, in lbs of OC/day ("a" x "b");
- d. if any material employed is by definition "PRM" or contains a substance that is by definition "PRM", the total number of hours this emission unit was used to coat non-metal parts, in hours/day; and
- e. if any material employed is by definition "PRM" or contains a substance that is by definition "PRM", the estimated hourly OC emission rate while coating non-metal parts, in lbs of OC/hr ("c"/"d").

e) Reporting Requirements

- (1) The permittee shall notify Ohio EPA, Southwest District Office, in writing of any monthly record showing that any photochemically reactive material was employed in this emissions unit. The notification shall include a copy of each record and shall be submitted within 30 days after the event occurs.

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified in c)(2), above;
  - b. any exceedance of the rolling, 365-day spray mold release agent usage rate of 118.6 tons;
  - c. any exceedance of the rolling, 365-day paste mold release agent usage rate of 19.5 tons;
  - d. any exceedance of the rolling, 365-day VOC emission limitation of 41.50 tons;
  - e. all days when the calculated air flow rate at the inlet to the thermal incinerator did not comply with air flow rate limitation of 25,200 scfm and when multiple polyurethane foam molding lines, which have control requirements, are operating; and
  - f. all days when the calculated air flow rate at the inlet to the thermal incinerator did not comply with air flow rate limitation of 10,300 scfm, and when an individual polyurethane foam molding line, which has control requirements, is operating.

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

- (3) The permittee shall submit quarterly summaries that include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
- (4) The permittee shall notify Ohio EPA, Southwest District Office, in writing of any record showing that the panel metal mesh filter system serving as PE control for this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be submitted within 30 days after the event occurs.
- (5) The permittee shall submit deviation (excursion) reports for that identify each exceedance of the following when the emissions unit is emitted OC emissions without the use of the control device:
- a. the average hourly OC emissions while coating non-metal parts exceed 8 pounds from the use of defined "PRM" or contains a substance that is by definition "PRM" materials; and/or
  - b. the daily OC emissions while coating non-metal parts exceed 40 pounds from the use of defined "PRM" or contains a substance that is by definition "PRM" materials.

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

f) Testing Requirements

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

- a. Emission Limitation: 13.0 pounds VOC per hour

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitation may be determined as follows:

$$Evoc = (Uspray) \times (VOCs) \times [1 - (CE \times DE)] + (Upaste) \times (VOCp)$$

Where:

Evoc = the maximum hourly VOC emission rate (lbs/hr);

Uspray = the maximum hourly spray release agent usage rate (41.7 lbs);

VOCs = the VOC content of the spray mold release agent (maximum of 96% or 0.96);

(CE x DE) = the capture efficiency multiplied by the destruction efficiency (Stack test from January 17 and 18, 2007, capture efficiency was determined to be 61.14% and destruction efficiency was determined to be 96.87%);

Upaste = the maximum hourly paste release agent usage rate (5.2 lbs); and

VOCp = the VOC content of paste mold release agent (maximum of 96% or 0.96)

Compliance with the hourly allowable VOC emission limitation shall be demonstrated based on the results of emission tests conducted in accordance with the procedures outlined in f)(2) of this permit.[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1)]

b. Emission Limitation:

41.50 tons VOC per rolling, 365-day summation

Applicable Compliance Method:

Compliance with the rolling, 365-day VOC emission limitation shall be determined through the record keeping requirements established in d)(4), of this permit.

c. Emission Limitations:

0.5 pound PE per hour

1.3 tons PE per year

Applicable Compliance Method:

The hourly PE limitation was established as follows:

$$E_{pe} = (U_{spray}) \times (S) \times [1 - (CE \times RE)]$$

Where:

$E_{pe}$  = the maximum hourly PE rate (lbs/hr);

$U_{spray}$  = the maximum hourly spray release agent usage rate (41.7 lbs/hr);

$S$  = the solids content of the spray mold release agent (maximum of 5% or 0.05);

$CE$  = the capture efficiency (assumed to be 100% for solids); and

$RE$  = the removal efficiency (assumed to be 78% for metal mesh panel filters)

If required, the permittee shall demonstrate compliance with hourly PE limitation above through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

The annual PE limitation was established as follows:

$$A_{pe} = (A_{spray}) \times (S) \times [1 - (CE \times RE)]$$

Where:

$A_{pe}$  = the maximum annual PE rate (tons/yr);

$A_{spray}$  = the maximum annual spray release agent usage rate (118.6 tons/year);

S = the solids content of the spray mold release agent (maximum of 5% or 0.05);

CE = the capture efficiency (assumed to be 100% for solids); and

RE = the removal efficiency (assumed to be 78% for panel filters)

d. Visible Emission Limitation:

10% opacity from the stack

During clean out, the opacity may not exceed 20% opacity except for one six minute period in any one hour where the opacity may not exceed 60% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

e. Formulation data or USEPA Method 24 shall be used to determine the VOC content of the materials employed in this emissions unit.

f. Emission Limitation:

The VOC emissions from the spray mold release agents for this emissions unit shall be vented to a thermal incinerator with a minimum destruction efficiency of 90%, by weight, for VOC.

Applicable Compliance Method:

Compliance with the control efficiency requirement above shall be demonstrated based on the results of emission tests conducted in accordance with the procedures as outlined in f)(2), of this permit.

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

a. The emissions testing shall be conducted within 12 months prior to the expiration of the Title V covering this facility.

b. The emission testing shall be conducted to demonstrate compliance with the following: the hourly VOC emission limitation and overall control efficiency requirements (both capture and control) for this emissions unit.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s):

i. Method 1 of 40 CFR, Part 60, Appendix A (for sample and velocity traverses);

ii. Method 2 of 40 CFR, Part 60, Appendix A (for velocity and volumetric flow rates);

- iii. Method 3 of 40 CFR, Part 60, Appendix A (for molecular weight of dry gas stream);
- iv. Method 4 of 40 CFR, Part 60, Appendix A (for moisture content of gas stream); and
- v. Methods 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A (for VOC emissions).

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 OAC rule 3745-21-10 or an approved alternative test protocol. 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 using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) 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 Ohio EPA Southwest District Office.
- (3) Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to Ohio EPA, Southwest 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 Ohio EPA, Southwest District Office's refusal to accept the results of the emission test(s).

Personnel from Ohio EPA, Southwest 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.

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 Ohio EPA, Southwest 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 Ohio EPA, Southwest District Office. to Ohio EPA, Southwest 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 Ohio EPA, Southwest District Office.

- (4) Compliance with the emission limitations specified by the SIP and the previous OAC rule 3745-21-07(G)(2) in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitations:

- The OC emissions from the use photochemically reactive liquid organic materials or substance containing photochemically reactive material shall not exceed 8 pounds per hour nor 40 pounds per day, while coating non-metal parts.

- Applicable Compliance Method:

- Compliance with the above OC emission limitations shall be determined by the recordkeeping requirement specified in Section d) and/or the stack testing as required and specified in Section f)(2).

- g) Miscellaneous Requirements

- (1) None.



2. P007, Foam Line 1

Operations, Property and/or Equipment Description:

Polyurethane Foam Molding Line.

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

(1) b)(1)f, d)(8), d)(9), and d)(10).

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 3745-31-05(A)(3) and (PTI 05-12749)	<p>Volatile organic compound (VOC) emissions shall not exceed 16.1 pounds per hour</p> <p>Particulate emissions (PE) shall not exceed 0.5 pound per hour and 1.3 tons per year.</p> <p>Visible PE from the stack shall not exceed 10% opacity, as a six-minute average, except during wax clean-out.</p> <p>During wax clean-out, the visible PE shall not exceed 20% opacity, as a six-minute average, except for one six-minute period in any one hour where the visible PE may not exceed 60% opacity.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G).</p> <p>c)(2) and c)(7), below.</p>
b.	OAC rule 3745-21-07(G)(2)	When coating non-metal parts, the OC emissions from the use photochemically reactive liquid organic materials or substance containing photochemically reactive material shall not exceed 8 pounds per hour nor 40 pounds per day or OC emissions will need to be vented to a control device and reduced by at least

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		85%.
		b)(2)c, d)(11), e)(5), and f)(4)..
c.	OAC rules 3745-17-07(A) and 3745-17-11(B)	b)(2)b, below.
d.	OAC rule 3745-31-05(D)	VOC emissions shall not exceed 43.97 tons per rolling, 365-day period.  c)(3) and c)(4), below..
e.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	c)(2), c)(5), d)(2), d)(6), and d)(7), below.
f.	OAC rule 3745-114-01	Ohio Toxic Rule.

(2) Additional Terms and Conditions

a. The 16.1 lbs VOC per hour, 0.5 lb PE per hour and 1.3 tons PE/year emission limitations were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to establish additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

b. The uncontrolled mass rate of particulate emissions (UMRE) from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II in OAC rule 3745-17-11 does not apply. Also, Table I does not apply because the facility is located in Highland County

This emissions unit is also exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

c. On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (G); therefore, paragraph (G) is no longer part of the State regulations. However, that rule revision has not been approved by the U.S.EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs to OAC rule 3745-21-07, the requirement of the previous OAC rule 3745-21-07(G) still exists as part of the federally approved SIP for Ohio.

Once the February 18, 2008, revised OAC rule 3745-21-07, or modified version of OAC rule 3745-21-07 is approved by the U.S. EPA and Ohio's State Implementation Plan (SIP) is revised, the terms and conditions within this permit which are required by previous OAC rule 3745-21-07(G) will not be required and will not be federally and/or state enforceable.

Once the February 18, 2008, revised OAC rule 3745-21-07, or modified version of OAC rule 3745-21-07 is approved by the U.S. EPA and Ohio's State Implementation Plan (SIP) is revised, the permittee shall take immediate steps to assure compliance with any and all requirements of the revised OAC rule and/or SIP.

## c) Operational Restrictions

- (1) The permittee shall not employ any liquid organic material that is a photochemically reactive material in this emissions unit. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5)
- (2) The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit (28 degrees Celsius) below the average temperature during the most recent emission tests that demonstrated the emissions unit was in compliance
- (3) The maximum annual spray mold release agent usage for this emissions unit shall not exceed 118.6 tons per rolling, 365-day period based upon a summation of the daily spray mold release agent usage rates.
- (4) The maximum annual paste mold release agent usage for this emissions unit shall not exceed 10.7 tons per rolling, 365-day period based upon a summation of the daily paste mold release agent usage rates.
- (5) The air flow rate at the inlet to the thermal incinerator shall be no less than the following:
  - a. 20,560 standard cubic feet per minute (scfm), when multiple polyurethane foam molding lines, which have control requirements, are operating; and
  - b. 10,300 scfm, when an individual polyurethane foam molding line, which has control requirements, is operating.
- (6) The permittee shall operate a panel metal mesh filter system to control PE whenever this emissions unit is in operation.
- (7) The VOC emissions from the spray mold release agents for this emissions unit shall be vented to a thermal incinerator with a minimum destruction efficiency of 90%, by weight, for VOC.

## d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the company name and identification for each liquid organic material employed; and
  - b. documentation on whether or not each liquid organic material employed is a photochemically reactive material.

[Authority for term: OAC rules 3745-31-05(A)(3) and 3745-77-07(C)(1)]
- (2) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated,

operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit (28 degrees C) below the average temperature during the most recent emissions test that demonstrated that the emission unit was in compliance.
  - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
- (3) The permittee shall maintain daily records of the following information for this emissions unit:
- a. the company name and identification for the spray mold release agent employed;
  - b. the VOC content of the spray mold release agent employed, in % by weight;
  - c. the spray mold release agent usage for each day, in pounds;
  - d. the rolling, 365-day summation of spray mold release agent usage, in tons (i.e., to convert pounds to tons divide by 2000 lbs/ton);
  - e. the company name and identification for the paste mold release agent employed;
  - f. the VOC content of the paste mold release agent employed, in % by weight;
  - g. the paste mold release agent usage for each day, in pounds; and
  - h. the rolling, 365-day summation of paste mold release agent usage, in pounds or tons.
- (4) The permittee shall calculate and maintain daily records of the following for this emissions unit:
- a. the VOC emissions, in pounds, for the spray mold release agent, calculated as follows:  
$$Es = (Us) \times (VOCs) \times [1 - (CE \times DE)]$$

Where:

Es = the daily VOC emission rate for the spray mold release agent, in pounds;

Us = the daily spray mold release agent usage, in pounds (from d)(3)c. above);

VOCs = the VOC content of the spray mold release agent, in %, by weight (from d)(3)b. above);

CE = the capture efficiency, as determined during the most recent compliance demonstration; and

DE = the destruction efficiency, as determined during the most recent compliance demonstration.

- b. the VOC emissions, in pounds, for the paste mold release agent, calculated as follows:

$$E_p = (U_p) \times (\text{VOC}_p)$$

Where:

$E_p$  = the daily VOC emission rate for the paste mold release agent, in pounds;

$U_p$  = the daily paste mold release agent usage, in pounds (from d)(3)g. above); and

$\text{VOC}_p$  = the VOC content of the paste mold release agent, in %, by weight (from d)(3)f, above).

- c. the total VOC emission rate, in pounds, i.e.,  $E_s + E_p$ ; and
- d. the rolling, 365-day VOC emission rate, in tons.
- (5) The permittee shall maintain records that document any time periods when the panel metal mesh filter system serving as PE control for this emissions unit was not in service while this emissions unit was operating.
- (6) The CAM plan for this emissions unit has been developed for VOC emissions through parametric monitoring of the capture and control system. The CAM performance indicators for VOC emissions include combustion temperature for destruction and air flow rate at the thermal incinerator inlet for capture. The combustion temperature indicator range for the thermal incinerator shall be any combustion temperature more than 50 degrees Fahrenheit (28 degrees Celsius) below the average temperature during the most recent emission tests that demonstrated this emissions unit was in compliance. The air flow rate at the inlet of the thermal incinerator indicator is identified in section A.II.5 for this emissions unit. The most recent compliance demonstration was used as the basis for developing the combustion temperature and air flow rate indicators. If the required monitoring demonstrates an excursion from the indicator ranges, then the permittee shall take corrective actions to restore the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (7) The permittee shall measure the air flow velocity at the inlet to the thermal incinerator with a minimum frequency of once per day while this emissions unit is in operation. The velocity measurement shall be performed in accordance with the procedures outlined in the CAM plan with any changes approved by Ohio EPA, Southwest District Office. Based upon the daily measured velocity, the permittee shall calculate the air flow rate. Units shall be in standard cubic feet per minute. The velocity measuring device shall be capable of accurately measuring the desired parameter. The measuring device shall be

calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Parts 64.6(c) and 64.7]

- (8) The permit to install for emissions units P005 and P007 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):
- a. Pollutant: Naptha (64742-47-8)
    - TLV (ug/m3): 200,000
    - Maximum hourly emission rate (lbs/hr): 12.1
    - Predicted 1-hour maximum ground level concentration (ug/m3): 2,056
    - Maximum acceptable ground level concentration (ug/m3): 4,761
  - b. \*\*Pollutant: 2,4 TDI (584-84-9)
    - TLV (ug/m3): 35.6
    - Maximum hourly emission rate (lbs/hr): 0.021
    - Predicted 1-hour maximum ground level concentration (ug/m3): 1.67
    - Maximum acceptable ground level concentration (ug/m3): 0.848
  - c. Pollutant: Diethanol-amine (111-42-2)
    - TLV (ug/m3): 2,000
    - Maximum hourly emission rate (lbs/hr): 0.00032 lbs/hr
    - Predicted 1-hour maximum ground level concentration (ug/m3): 0.025
    - Maximum acceptable ground level concentration (ug/m3): 47.6
- (9) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters; the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change.

Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" 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 the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

- (10) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. a documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- (11) This facility shall maintain the following daily records if any material employed is by definition photo chemically reactive material "PRM" or contains a substance that is by definition "PRM" during any time when non-metal parts are being coated in this emissions unit and the organic compound (OC) emissions are not being vented to the control device:
  - a. if any material employed is by definition "PRM" or contains a substance that is by definition "PRM", the amount of each "PRM" material or "PRM" containing material employed while coating non-metal parts, in gallons;

- b. if any material employed is by definition "PRM" or contains a substance that is by definition "PRM", the organic compound content of each "PRM" material or "PRM" containing material employed while coating non-metal parts, in lbs/gal;
- c. if any material employed is by definition "PRM" or contains a substance that is by definition "PRM", the organic compound (OC) emissions of each "PRM" material or "PRM" containing material employed while coating non-metal parts, in lbs of OC/day ("a" x "b");
- d. if any material employed is by definition "PRM" or contains a substance that is by definition "PRM", the total number of hours this emission unit was used to coat non-metal parts, in hours/day; and
- e. if any material employed is by definition "PRM" or contains a substance that is by definition "PRM", the estimated hourly OC emission rate while coating non-metal parts, in lbs of OC/hr ("c"/"d").

e) Reporting Requirements

- (1) The permittee shall notify Ohio EPA, Southwest District Office, in writing of any monthly record showing that any photochemically reactive material was employed in this emissions unit. The notification shall include a copy of each record and shall be submitted within 30 days after the event occurs.

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator did not comply with the temperature limitation specified in c)(2), above;
  - b. any exceedance of the rolling, 365-day spray mold release agent usage rate of 118.6 tons;
  - c. any exceedance of the rolling, 365-day paste mold release agent usage rate of 10.7 tons;
  - d. any exceedance of the rolling, 365-day VOC emission limitation of 41.50 tons;
  - e. all days when the calculated air flow rate at the inlet to the thermal incinerator did not comply with air flow rate limitation of 25,200 scfm and when multiple polyurethane foam molding lines, which have control requirements, are operating; and
  - f. all days when the calculated air flow rate at the inlet to the thermal incinerator did not comply with air flow rate limitation of 10,300 scfm, and when an individual polyurethane foam molding line, which has control requirements, is operating.

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

- (3) The permittee shall submit quarterly summaries that include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
- (4) The permittee shall notify Ohio EPA, Southwest District Office, in writing of any record showing that the panel metal mesh filter system serving as PE control for this emissions unit was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be submitted within 30 days after the event occurs.
- (5) The permittee shall submit deviation (excursion) reports for that identify each exceedance of the following when the emissions unit is emitted OC emissions without the use of the control device:
  - a. the average hourly OC emissions while coating non-metal parts exceed 8 pounds from the use of defined "PRM" or contains a substance that is by definition "PRM" materials; and/or
  - b. the daily OC emissions while coating non-metal parts exceed 40 pounds from the use of defined "PRM" or contains a substance that is by definition "PRM" materials.

The deviation (excursion) reports shall be submitted as specified in of this permit

f) Testing Requirements

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

- a. Emission Limitation: 16.1 pounds VOC per hour

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitation may be determined as follows:

$$Evoc = (Uspray) \times (VOCs) \times [1 - (CE \times DE)] + (Upaste) \times (VOCp)$$

Where:

Evoc = the maximum hourly VOC emission rate (lbs/hr)

Uspray = the maximum hourly spray release agent usage rate (41.7 lbs)

VOCs = the VOC content of the spray mold release agent (maximum of 95% or 0.95)

CE = the VOC capture efficiency from the spray mold release agents, as determined during the most recent compliance test

DE = the VOC destruction efficiency, as determined during the most recent compliance test

Upaste = the maximum hourly paste release agent usage rate (4.4 lbs)

VOCp = the VOC content of paste mold release agent (maximum of 95% or 0.95)

Compliance with the hourly allowable VOC emission limitation shall be demonstrated based on the results of emission tests conducted in accordance with the procedures outlined in f)(2) of this permit.

b. Emission Limitation:

43.97 tons VOC per rolling, 365-day summation

Applicable Compliance Method:

Compliance with the rolling, 365-day VOC emission limitation shall be determined through the record keeping requirements established in d)(4), of this permit.

c. Emission Limitations:

0.5 pound PE per hour

1.3 tons PE per year

Applicable Compliance Method:

The hourly PE limitation was established as follows:

$$Epe = (Uspray) \times (S) \times [1 - (CE \times RE)]$$

Where:

Epe = the maximum hourly PE rate (lbs/hr);

Uspray = the maximum hourly spray release agent usage rate (41.7 lbs/hr);

S = the solids content of the spray mold release agent (maximum of 5% or 0.05);

CE = the capture efficiency (assumed to be 100% for solids); and

RE = the removal efficiency (assumed to be 78% for panel metal mesh filters)

If required, the permittee shall demonstrate compliance with hourly PE limitation above through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

The annual PE limitation was established as follows:

$$Ape = (Aspray) \times (S) \times [1 - (CE \times RE)]$$

Where:

Ape = the maximum annual PE rate (tons/yr);

Aspray = the maximum annual spray release agent usage rate (118.6 tons/year);

S = the solids content of the spray mold release agent (maximum of 5% or 0.05);

CE = the capture efficiency (assumed to be 100% for solids); and

RE = the removal efficiency (assumed to be 78% for panel filters)

d. Visible Emission Limitation:

Visible PE from the stack shall not exceed 10% opacity, as a six-minute average, except during wax clean-out.

During wax clean-out, the visible PE shall not exceed 20% opacity, as a six-minute average, except for one six-minute period in any one hour where the visible PE may not exceed 60% opacity.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

e. Formulation data or USEPA Method 24 shall be used to determine the VOC content of the materials employed in this emissions unit.

f. Emission Limitation:

The VOC emissions from the spray mold release agents for this emissions unit shall be vented to a thermal incinerator with a minimum destruction efficiency of 90%, by weight, for VOC.

Applicable Compliance Method:

Compliance with the control efficiency requirement above shall be demonstrated based on the results of emission tests conducted in accordance with the procedures as outlined in f)(2), of this permit.

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

a. The emissions testing shall be conducted within 12 months prior to the expiration of the Title V covering this facility.

b. The emission testing shall be conducted to demonstrate compliance with the following: the hourly VOC emission limitation and overall control efficiency requirements (both capture and control) for this emissions unit.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s):

i. Method 1 of 40 CFR Part 60, Appendix A (for sample and velocity traverses);

- ii. Method 2 of 40 CFR Part 60, Appendix A (for velocity and volumetric flow rates);
- iii. Method 3 of 40 CFR Part 60, Appendix A (for molecular weight of dry gas stream);
- iv. Method 4 of 40 CFR Part 60, Appendix A (for moisture content of gas stream); and
- v. Method 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A (for VOC emissions).

The destruction control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or an approved alternative test protocol. 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 using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

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 Ohio EPA, Southwest District Office.

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

Personnel from Ohio EPA, Southwest 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.

- (3) A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to Ohio EPA, Southwest 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 Ohio EPA, Southwest District Office
- (4) Compliance with the emission limitations specified by the SIP and the previous OAC rule 3745-21-07(G)(2) in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

The OC emissions from the use photochemically reactive liquid organic materials or substance containing photochemically reactive material shall not exceed 8 pounds per hour nor 40 pounds per day, while coating non-metal parts.

Applicable Compliance Method:

Compliance with the above OC emission limitations shall be determined by the recordkeeping requirement specified in Section d) and/or the stack testing as required and specified in Section f)(2).

g) Miscellaneous Requirements

- (1) None.