



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

11/20/2015

Mr. Kim Myers
 Amsted Rail - Columbus Plant
 3900 Bixby Road
 Groveport, OH 43125

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
 Facility ID: 0125100987
 Permit Number: P0119090
 Permit Type: Initial Installation
 County: Franklin

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

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

Environmental Review Appeals Commission
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

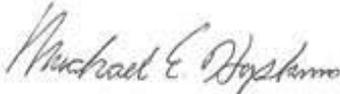
Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: U.S. EPA
Ohio EPA-CDO



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
Amsted Rail - Columbus Plant**

Facility ID:	0125100987
Permit Number:	P0119090
Permit Type:	Initial Installation
Issued:	11/20/2015
Effective:	11/20/2015



Division of Air Pollution Control
Permit-to-Install
for
Amsted Rail - Columbus Plant

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Final Permit-to-Install
Amsted Rail - Columbus Plant
Permit Number: P0119090
Facility ID: 0125100987
Effective Date: 11/20/2015

Authorization

Facility ID: 0125100987
Facility Description: Steel Foundries
Application Number(s): A0053681
Permit Number: P0119090
Permit Description: Initial installation for a sleeve making operation which includes sleeve storage, material unloading (bucket elevator), storage silo, phenolic urethane cold box machine, sleeve material dryer, and day bin.
Permit Type: Initial Installation
Permit Fee: \$1,000.00
Issue Date: 11/20/2015
Effective Date: 11/20/2015

This document constitutes issuance to:

Amsted Rail - Columbus Plant
3900 Bixby Road
Groveport, OH 43125

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

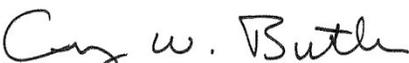
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Permit-to-Install
Amsted Rail - Columbus Plant
Permit Number: P0119090
Facility ID: 0125100987
Effective Date: 11/20/2015

Authorization (continued)

Permit Number: P0119090

Permit Description: Initial installation for a sleeve making operation which includes sleeve storage, material unloading (bucket elevator), storage silo, phenolic urethane cold box machine, sleeve material dryer, and day bin.

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

Emissions Unit ID:	F008
Company Equipment ID:	Sleeve Core Storage
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P032
Company Equipment ID:	Sleeve Making
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
Amsted Rail - Columbus Plant
Permit Number: P0119090
Facility ID: 0125100987
Effective Date: 11/20/2015

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

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

- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Central 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, Central District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Central 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, Central District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

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

6. Compliance Requirements

- a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

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

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Ohio EPA DAPC, Central 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, Central 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, Central District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a Permit-to-Install.

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

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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



Final Permit-to-Install
Amsted Rail - Columbus Plant
Permit Number: P0119090
Facility ID: 0125100987
Effective Date: 11/20/2015

B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. Visible fugitive particulate emissions, as established in 40 CFR subpart ZZZZZ (63.10895(e)), shall not exceed 20 percent opacity, as a 6-minute average, except for one 6-minute average that does not exceed 30% opacity in any 1 hour observation period for an area sources under the foundry area source MACT.



Final Permit-to-Install
Amsted Rail - Columbus Plant
Permit Number: P0119090
Facility ID: 0125100987
Effective Date: 11/20/2015

C. Emissions Unit Terms and Conditions



1. F008, Sleeve Storage

Operations, Property and/or Equipment Description:

Storage of finished sleeves prior to shipment.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 06/30/08	See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/08	See b)(2)b.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the potential to emit is less than 10 tons per year taking into account the federally enforceable restriction in 2.b)(1)g.

[Authority for term: OAC rule 3745-31-05(A)(3), as effective 06/30/08]

b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the calculated annual emission rate for VOC is less than 10 tons/year, taking into account the federally enforceable rule limit established in PTI P0119090 for P032.

[Authority for term: OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/08]

c) Operational Restrictions

(1) None.

d) Recordkeeping Requirements

- (1) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's controlled maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install (PTI) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

e) Reporting Requirements

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

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. None.

g) Miscellaneous Requirements

- (1) None.

2. P032, Sleeve Making

Operations, Property and/or Equipment Description:

Sleeve making line includes mixer, phenolic urethane cold box machine, material dryer, and day bin.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)	See b)(2)a.
b.	OAC rule 3745-17-08(B)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	PM emissions from the baghouse stack shall not exceed 2.87 pounds per hour (lbs/hr), based upon Table I of Figure II.
d.	OAC rule 3745-31-05(A)(3), as effective 06/30/08	See b)(1)g. and b)(2)c.
e.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/08	See b)(2)d.
f.	OAC rule 3745-31-05(D) [Synthetic minor established to avoid major NSR]	Volatile organic compound (VOC) emissions stack and fugitive emissions serving the mixer and sleeve machine shall not exceed 2.6 tons per rolling, 12-month summation. See b)(2)e. – g.

(2) Additional Terms and Conditions

a. This emissions unit is exempt from the visible fugitive PE limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(d) because the emissions unit is not subject to the requirements of OAC rule 3745-17-08(B).

b. Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

- c. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the potential to emit is less than 10 tons per year taking into account the federally enforceable restriction in b)(1)g.

[Authority for term: OAC rule 3745-31-05(A)(3), as effective 06/30/08]

- d. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

- i. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from the mixer since the calculated annual emission rate for VOC is less than 10 tons/year, taking into account the federally enforceable rule limit of 467,500 pounds of Part I resin and 382,500 pounds of Part II resin per year, based upon a rolling, 12-month summation under OAC rule 3745-31-05(D).

- ii. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from Sleeve Making since the calculated annual emission rate for VOC is less than 10 tons/year, taking into account the federally enforceable rule limit of 110,500 pounds of catalyst per year, based upon a rolling, 12-month summation under OAC rule 3745-31-05(D).

- e. The VOC emissions from the phenolic urethane cold box machine shall be vented to the wet scrubber at all times the emissions unit is in operation.

- f. The emissions from the mixer, dryer and day bin shall be vented to a baghouse at all times the emissions units are in operation.

- g. The baghouse serving the mixer, dryer and day bin shall achieve an outlet concentration of 0.01 grains per dry standard cubic foot (gr/dscf) for PM, PM10, and PM2.5.

- h. The potential to emit for a single hazardous air pollutant (HAP) and combined hazardous air pollutants (HAPs) from this emissions unit is less than one ton per year.

c) **Operational Restrictions**

- (1) The maximum annual Part I resin usage for the mixer shall not exceed 467,500 pounds, based upon a rolling, 12-month summation of the Part I resin usage figures. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the Part I resin usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Resin Part I Usage (lbs)</u>
1	38,958
1-2	77,916
1-3	116,874
1-4	155,832
1-5	194,790
1-6	233,748
1-7	272,706
1-8	311,664
1-9	350,622
1-10	389,580
1-11	428,538
1-12	467,500

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual Part I resin usage limitation shall be based upon a rolling, 12-month summation of the Part I resin usage figures.

- (2) The maximum annual Part II resin usage for the mixer shall not exceed 382,500 pounds, based upon a rolling, 12-month summation of the Part II resin usage figures. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the Part II resin usage levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Part II Resin Usage (lbs)</u>
1	31,875
1-2	63,750
1-3	95,625
1-4	127,500
1-5	159,375
1-6	191,250
1-7	223,125
1-8	255,000
1-9	286,875
1-10	318,750
1-11	350,625
1-12	382,500

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual Part II resin usage limitation shall be based upon a rolling, 12-month summation of the Part II resin usage figures.

- (3) The maximum annual catalyst usage for the phenolic urethane cold box core machine shall not exceed 110,500 pounds, based upon a rolling, 12-month summation of the catalyst usage figures. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the catalyst usage levels specified in the following table:



<u>Month(s)</u>	<u>Maximum Allowable Cumulative Catalyst Usage (lbs)</u>
1	9,208
1-2	18,416
1-3	27,624
1-4	36,832
1-5	46,040
1-6	55,248
1-7	64,456
1-8	73,664
1-9	82,872
1-10	92,080
1-11	101,288
1-12	110,500

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual catalyst usage limitation shall be based upon a rolling, 12-month summation of the catalyst usage figures.

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

- (1) The permittee shall maintain monthly records of the following information for the emissions unit:
 - a. the company identification of each Part I resin, Part II resin and catalyst;
 - b. the amount, in pounds, of each Part I resin, Part II resin and catalyst material used;
 - c. the rolling, 12-month summation of Part I resin, Part II resin and catalyst materials used, in pounds; and
 - d. the stack and fugitive VOC emissions rate from all Part I resin, Part II resin and catalyst materials based on a rolling, 12-month summation as calculated in f)(1)a.

The updated rolling, 12-month summation of the total VOC emissions shall include information for the current month and the preceding eleven calendar months.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative Part I resin usage, Part II resin usage, catalyst usage and VOC emissions for each calendar month.

- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range or limit for the pressure drop across the scrubber, the liquid flow rate, and the liquid pH shall be based upon the manufacturer's and/or resin supplier's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.

- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, water gauge), the scrubber liquid flow rate (in gallons per minute), and the scrubber liquid pH during operation of this emissions unit, including periods of startup and shutdown. The permittee shall record the pressure drop across the scrubber, the scrubber liquid's pH and flow rate on a continuous basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's and/or resin supplier's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable liquid flow rate and the liquid pH shall be based upon the manufacturer's and/or resin supplier's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.

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

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

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

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

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

These range(s) and/or limit(s) for the pressure drop, liquid flow rate, and pH are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range or limit for the pressure drop, liquid flow rate, or pH based upon information obtained during future performance tests that demonstrate compliance with the allowable VOC emission rate for this/these emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

- (4) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's controlled maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install (PTI) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.
- (5) The pressure drop across the baghouse shall be maintained within the range of 1 to 8 inches of water while the emissions units are in operation.
- (6) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

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

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

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

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

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

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

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all exceedances of the rolling, 12-month VOC emissions, and 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 VOC emissions;
 - b. all exceedances of the rolling, 12-month Part I resin, Part II resin and catalyst usage, and for the first 12 calendar months of operation or the first 12 calendar months following issuance of this permit, all exceedances of the maximum allowable cumulative material usage;

- c. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the liquid flow rate, or the liquid pH was outside of the appropriate range or limit specified by the manufacturer and/or resin supplier and outside of the acceptable range for each parameter following any required compliance demonstration;
- d. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber;
- e. each incident described in “c” and/or “d” (above) where a prompt investigation was not conducted;
- f. each incident described in “c” and/or “d” where prompt corrective action, that would bring the pressure drop, liquid flow rate, or scrubber liquid pH into compliance with the acceptable range, was determined to be necessary and was not taken;
- g. each incident described in “c” and/or “d” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- h. each period of time (start time and date, end time and date) when the pressure drop across the baghouse was outside the acceptable range;
- i. any period of time (start time and date, end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
- j. each incident in “h” and/or “i” where a prompt investigation was not conducted;
- k. each incident in “h” and “i” where a prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- l. the permittee shall identify any exceedances of the limitations established in Sections c)(1) – (3) for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit.

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 annual reports that specify the total combined PM, PM10, PM2.5 and VOC emissions from the emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. The reporting requirement may be satisfied by including and identifying the specific emissions data for the emissions unit in the annual Fee Emission Report.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Particulate emissions shall not exceed 2.87 lbs/hr

Applicable Compliance Method:

The emission limitation was established by "Table I" in the appendix to OAC rule 3745-17-11(A)(2). If required, compliance shall be based upon Method 5 of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

VOC stack and fugitive emissions shall not exceed 2.6 tons per rolling, 12-month summation

Applicable Compliance Method(s):

Compliance with the emission limitation shall be determined by the summation of the stack and fugitive emissions.

*The monthly **stack and fugitive** emissions from the mixing operation shall be based on the following equation:*

$$\text{VOC} = (\text{EF}) * (\text{P}) * (\text{ton}/2000 \text{ lbs})$$

where,

$$\text{VOC} = \text{VOC emissions (monthly)}$$

EF = 3.104 lb VOC/ton resin (PTI Application, "Exactcast Resin I/Resin II – OCMA – VOC Data Sheet," 6/16/15, ASK Chemical)

P = usage (monthly usage of Part I resin and Part II resin, as determined in d)(1)b.)

*The monthly **stack** emissions from the sleeve making operation shall be based on the following equation:*

$$\text{VOC} = (\text{EF}) * (\text{P}) * (1-\text{CPE}) * (1-\text{CE}) * (\text{ton}/2000 \text{ lbs})$$

where,

$$\text{VOC} = \text{VOC emissions (monthly)}$$



EF = emission factor, 0.13 lb catalyst/lb resin (PTI Application A0053681, submitted 06/18/15)

P = usage (monthly usage of catalyst, as determined in d)(1)b.)

CPE = capture efficiency, 99%

CE = control efficiency, 97.5%

*The monthly **fugitive** emissions from the core making operation shall be based on the following equation:*

$$\text{VOC} = (\text{EF}) * (\text{P}) * (1 - \text{CPE})$$

where,

VOC = VOC emissions (monthly)

EF = emission factor, 0.13 lb catalyst/lb resin (PTI Application A0053681, submitted 06/18/15)

P = usage (monthly usage of catalyst, as determined in d)(1)b.)

CPE = capture efficiency, 99%

- (2) The permittee shall conduct, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing for P032 shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of the emissions unit.
 - b. For P032 the emission testing shall be conducted to demonstrate compliance with 0.38 pounds VOC per hour, and the permittee shall maintain records of the amount of resin employed during the test(s).
 - c. For P032 the emission testing shall be conducted to demonstrate compliance with the allowable PM, PM10, and PM2.5 concentration of 0.01 gr/dscf in the exhaust stream.
 - d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

VOC – 40 CFR Part 60, Appendix A, Methods 25, 25A, and/or 18, and/or 302

PM - 40 CFR Part 60, Appendix A, Methods 1 through 5

PM10/PM2.5 – 40 CFR Part 60, Appendix A, Methods 201 and 202

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

- e. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by Ohio EPA, Central District Office. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
 - f. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to Ohio EPA, Central 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, Central District Office's refusal to accept the results of the emission test(s).
 - g. Personnel from Ohio EPA, Central 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.
 - h. 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, Central 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, Central District Office.
- g) Miscellaneous Requirements
- (1) The 0.38 pound VOC per hour emission limitation was established using the following equation:
$$\text{lb VOC/hr} = (0.13 \text{ lb VOC/lb resin}) * (0.059 \text{ ton resin/hr}) * (2000 \text{ lbs/ton}) * (99/100) * (1 - (97.5/100))$$

where,

0.13 lb VOC/ton resin = emission factor, 0.13 lb catalyst/lb resin (PTI Application A0053681, submitted 06/18/15)

0.059 ton resin/hr = amount of resin per hour (PTI Application A0053681, submitted 06/18/15)

(99/100) = capture rate for the scrubber (PTI Application A0053681, submitted 06/18/15)

(1-(97.5/100)) = control efficiency for the scrubber (PTI Application A0053681, submitted 06/18/15)