



12/12/2014

Heather Rainwater
McWane Ductile - Ohio
P. O. Box 6001
2266 South Sixth Street
Coshocton, OH 43812-6001

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0616010006
Permit Number: P0116276
Permit Type: Administrative Modification
County: Coshocton

Certified Mail

Table with 2 columns: Yes/No and various permit conditions like TOXIC REVIEW, PSD, SYNTHETIC MINOR TO AVOID MAJOR NSR, etc.

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](http://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](http://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](http://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, Southeast District Office at (740)3858501 or the Office of Compliance Assistance and Pollution Prevention at (614)644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA  
Ohio EPA-SEDO; West Virginia



## Response to Comments

Facility ID:	0616010006
Facility Name:	McWane Ductile - Ohio
Facility Description:	Ductile Iron Pipe and Utility Poles
Facility Address:	2266 South Sixth Street P. O. Box 6001 Coshocton, OH 43812-6001 Coshocton County
Permit:	P0116276, Permit-To-Install - Administrative Modification
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Coshocton Tribune on 10/31/2014. The comment period ended on 11/30/2014.	
Hearing date (if held)	None.
Hearing Public Notice Date (if different from draft public notice)	N/A.

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

### 1. Comments Received by McWane Ductile – Ohio (formerly Clow Water Systems):

- a. **Comment:** The permit description in multiple locations mentions F022 and F015 both of which are shutdown.
- b. **Response:** All references to F022 and F015 have been removed.
- c. **Comment:** Page 2 of 57 does not list F066 as an EU in the permit.
- d. **Response:** Emissions unit F066 has been excluded from this permit due to a Chapter 31 modification being requested. The inclusion of F066 in this permit was a mistake and all references to F066 have been removed.
- e. **Comment:** F065, F066, P034 – should the opacity exception be one 6 minute average at 30% instead of 27%?
- f. **Response:** All references to emissions unit F066 have been removed. Please see response “d.” above. BAT for F065 and P034 was originally established to include equivalent requirements to those found in 40 CFR Part 63, Subpart EEEEE. Subpart EEEEE establishes the 27% opacity requirement.
- g. **Comment:** F066 – all numbers and requirements should match F065. I didn’t notice any change based on my modification request to increase its capacity.
- h. **Response:** Emissions unit F066 has been excluded from this permit due to a Chapter 31



modification being requested. The inclusion of F066 in this permit was a mistake and all references to F066 have been removed.

- i. **Comment:** K006 – f) Testing Requirements shows 50% transfer and 90% control. This should be 70% transfer and 99.87% control
- j. **Response:** These values have been corrected.
- k. **Comment:** P034 – I do not see the addition of core wash
- l. **Response:** The terms and conditions established for emissions unit P034 include core wash requirements. Please see d)(1)c.-d. and the compliance methods found in f)(1)b. – c.



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install  
for  
McWane Ductile - Ohio**

Facility ID:	0616010006
Permit Number:	P0116276
Permit Type:	Administrative Modification
Issued:	12/12/2014
Effective:	12/12/2014





**Division of Air Pollution Control**  
**Permit-to-Install**  
for  
McWane Ductile - Ohio

**Table of Contents**

Authorization .....	1
A. Standard Terms and Conditions .....	3
1. Federally Enforceable Standard Terms and Conditions .....	4
2. Severability Clause .....	4
3. General Requirements .....	4
4. Monitoring and Related Record Keeping and Reporting Requirements.....	5
5. Scheduled Maintenance/Malfunction Reporting .....	6
6. Compliance Requirements .....	6
7. Best Available Technology .....	7
8. Air Pollution Nuisance .....	8
9. Reporting Requirements .....	8
10. Applicability .....	8
11. Construction of New Sources(s) and Authorization to Install .....	8
12. Permit-To-Operate Application .....	9
13. Construction Compliance Certification .....	10
14. Public Disclosure .....	10
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations .....	10
16. Fees.....	10
17. Permit Transfers .....	10
18. Risk Management Plans .....	10
19. Title IV Provisions .....	10
B. Facility-Wide Terms and Conditions.....	11
C. Emissions Unit Terms and Conditions .....	13
1. F065, Specialty Shell Core Machine .....	14
2. K006, Pipe painting operation - small line .....	19
3. P034, Shell core machine number 4 .....	24
4. P035, Mold Peening.....	32
5. P036, Mold blaster .....	36
6. P037, Pipe blowout.....	40
7. P038, Mold grinder (Delvo No. 2).....	44





**Final Permit-to-Install**  
McWane Ductile - Ohio  
**Permit Number:** P0116276  
**Facility ID:** 0616010006  
**Effective Date:** 12/12/2014

## Authorization

Facility ID: 0616010006  
Facility Description: Ductile Iron Pipe and Utility Poles  
Application Number(s): A0050000, A0050001, M0002613, M0002616, M0002618, M0002655  
Permit Number: P0116276  
Permit Description: Facility-initiated administrative modification to P034 to include core wash (previously K001), F065 to include core wash (previously K001); K006 - to include the correct modification date); P035-P038 to update the BAT requirements to follow current guidance.  
Permit Type: Administrative Modification  
Permit Fee: \$0.00  
Issue Date: 12/12/2014  
Effective Date: 12/12/2014

This document constitutes issuance to:

McWane Ductile - Ohio  
2266 South Sixth Street  
P. O. Box 6001  
Coshocton, OH 43812-6001

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

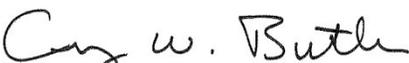
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



## Authorization (continued)

Permit Number: P0116276  
 Permit Description: Facility-initiated administrative modification to P034 to include core wash (previously K001), F065 to include core wash (previously K001); K006 - to include the correct modification date); P035-P038 to update the BAT requirements to follow current guidance.

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>F065</b>                        |
| Company Equipment ID:             | Large Specialty Shell Core Machine |
| Superseded Permit Number:         | P0109174                           |
| General Permit Category and Type: | Not Applicable                     |
| <b>Emissions Unit ID:</b>         | <b>K006</b>                        |
| Company Equipment ID:             | Pipe Paint Operation - Small Line  |
| Superseded Permit Number:         | 06-07432                           |
| General Permit Category and Type: | Not Applicable                     |
| <b>Emissions Unit ID:</b>         | <b>P034</b>                        |
| Company Equipment ID:             | Shell Core Machine No. 4 - Pipe    |
| Superseded Permit Number:         | P0109175                           |
| General Permit Category and Type: | Not Applicable                     |
| <b>Emissions Unit ID:</b>         | <b>P035</b>                        |
| Company Equipment ID:             | Mold Peener                        |
| Superseded Permit Number:         | 06-08238                           |
| General Permit Category and Type: | Not Applicable                     |
| <b>Emissions Unit ID:</b>         | <b>P036</b>                        |
| Company Equipment ID:             | Mold Blaster                       |
| Superseded Permit Number:         | 06-08238                           |
| General Permit Category and Type: | Not Applicable                     |
| <b>Emissions Unit ID:</b>         | <b>P037</b>                        |
| Company Equipment ID:             | Pipe Blowout                       |
| Superseded Permit Number:         | 06-08238                           |
| General Permit Category and Type: | Not Applicable                     |
| <b>Emissions Unit ID:</b>         | <b>P038</b>                        |
| Company Equipment ID:             | Mold Grinder (Delvo No. 2)         |
| Superseded Permit Number:         | 06-08238                           |
| General Permit Category and Type: | Not Applicable                     |



**Final Permit-to-Install**  
McWane Ductile - Ohio  
**Permit Number:** P0116276  
**Facility ID:** 0616010006  
**Effective Date:** 12/12/2014

## **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, Southeast 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, Southeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
  - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Southeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## **5. Scheduled Maintenance/Malfunction Reporting**

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

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

## **6. Compliance Requirements**

- a) 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, Southeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## **7. Best Available Technology**

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



**8. Air Pollution Nuisance**

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

**9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southeast District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted 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**  
McWane Ductile - Ohio  
**Permit Number:** P0116276  
**Facility ID:** 0616010006  
**Effective Date:** 12/12/2014

## **B. Facility-Wide Terms and Conditions**



**Final Permit-to-Install**  
McWane Ductile - Ohio  
**Permit Number:** P0116276  
**Facility ID:** 0616010006  
**Effective Date:** 12/12/2014

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.



**Final Permit-to-Install**  
McWane Ductile - Ohio  
**Permit Number:** P0116276  
**Facility ID:** 0616010006  
**Effective Date:** 12/12/2014

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



**1. F065, Specialty Shell Core Machine**

**Operations, Property and/or Equipment Description:**

3.85 ton per hour uncontrolled core making machine processing resin-coated sand and equipped with a 3.0 million BTU/hour natural gas-fired process heater; maximum throughput rate of 5,500 tons of resin-coated sand per rolling, 12-month period

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) g)(1)

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(D) (Synthetic minor to restrict federally enforceable potential to emit of this emissions unit to accommodate future projects)	Volatile organic compound (VOC) emissions shall not exceed 6.24 tons per rolling, 12-month period.  Particulate emissions (PE) shall not exceed 0.39 ton per rolling, 12-month period.  PM <sub>10</sub> emissions shall not exceed 0.35 ton per rolling, 12-month period.  See c)(1) below.
b.	OAC rule 3745-31-05(A)(3)	The emissions limitations established pursuant to this rule for VOC, PE and PM <sub>10</sub> are equivalent to the emissions limitations established pursuant to OAC rule 3745-31-05(D).  See b)(2)a. below.
c.	OAC rule 3745-31-05(A)(3)(a)(ii)	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE and PM <sub>10</sub> emissions from this air contaminant source since the potential to emit is less than 10 tons/year.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>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 emissions rate is less than 10 tons/year taking into account the restriction from OAC rule 3745-31-05(E).</p> <p>See b)(2)b. below.</p>
e.	OAC rules 3745-17-07(B) and 3745-17-08(B)	See b)(2)c. below.

(2) Additional Terms and Conditions

- a. This Best Available Control (BAT) emissions limit applies until U.S. EPA approves Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- 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.
- c. This facility is located in Coshocton County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.

c) Operational Restrictions

- (1) The permittee has requested a federally enforceable limitation on resin-coated sand throughput for the purposes of limiting potential to emit of VOC, PE and PM<sub>10</sub>. Therefore, the maximum throughput rate of resin-coated sand shall not exceed 5,500 tons as a rolling, 12-month summation. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the throughput rate upon issuance of this permit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the total throughput of resin-coated sand, in tons, of this emissions unit;
  - b. the total throughput of core wash, in gallons, of this emissions unit;



- c. the rolling, 12-month summation of throughput of resin-coated sand, in tons (i.e., the throughput for the current month added to the throughput for the previous 11 calendar months);
- d. the rolling, 12-month summation of throughput of core wash, in gallons (i.e., the throughput for the current month added to the throughput of the previous 11 calendar months);
- e. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the core wash throughput, in gallons; and.
- f. the rolling, 12-month summation of the total VOC, PE and PM<sub>10</sub> emissions

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 resin-coated sand throughput limitation specified in c)(1); and
  - b. all exceedances of the rolling, 12-month VOC, PE and PM<sub>10</sub> emissions limitations specified in b)(1)a.

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

- a. Emissions Limitation:

VOC emissions shall not exceed 6.24 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based on the following calculation:

VOC (tons/rolling, 12-month period) = [(actual tons of resin-coated sand used per rolling, 12-month period as determined pursuant to d)(1) X VOC emissions factor) + (0.033 lb/hr (hourly PTE of process heater) X 8,760 hours/yr)] X 1 ton/2,000 lbs



Where:

2.218 lbs VOC/ton of sand = VOC emissions factor for process (from permittee's application based on vendor-supplied emissions information).

If required, formulation data or USEPA Method 24 may be used to determine the VOC content of the resin-coated sand.

b. Emissions Limitation:

PE shall not exceed 0.39 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the ton per rolling, 12-month period emissions limitation shall be demonstrated based on the following calculation:

PE (tons/rolling, 12-month period) = [(actual tons of resin-coated sand used per rolling, 12-month period as determined pursuant to d)(1) X PE emissions factor for resin-coated sand X (1-building settling factor)) + (0.021 lb/hr (hourly PTE of process heater) X 8,760 hours/yr) + (actual gallons of core wash used per rolling, 12-month period as determined pursuant to d)(1) X PE emissions factor for core wash X (1 – transfer efficiency) X (1 – building settling factor))] X 1 ton/2,000 lbs

Where:

PE emissions factor for resin-coated sand = 0.35 lb PE/ton of sand (RACM Table 2.7-1, 9/80);

Building settling factor = 70% (per permittee's application);

PE emissions factor for core wash = 0.38 lb PE/gallon of wash (Refcobar 7502 as applied emissions factor);

Transfer efficiency = 70% (per permittee's application).

c. Emissions Limitation:

PM<sub>10</sub> emissions shall not exceed 0.35 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the ton per rolling, 12-month period emissions limitation shall be demonstrated based on the following calculation:

PM<sub>10</sub> (tons/rolling, 12-month period) = [(actual tons of resin-coated sand used per rolling, 12-month period as determined pursuant to d)(1) X PM<sub>10</sub> emissions factor for resin-coated sand X (1-building settling factor)) + (0.021 lb/hr (hourly PTE of process heater) X 8,760 hours/yr) + (actual gallons of core wash used per rolling, 12-month period as determined pursuant to d)(1) X PE emissions factor



for core wash X (1 – transfer efficiency) X (1 – building settling factor))] X 1  
ton/2,000 lbs

Where:

PM<sub>10</sub> emissions factor for resin-coated sand = 0.30 lb PE/ton of sand (RACM Table 2.7-1, 9/80);

Building settling factor = 70% (per permittee's application);

PM<sub>10</sub> emissions factor for core wash = 0.38 lb PE/gallon of wash (Refcobar 7502 as applied emissions factor);

Transfer efficiency = 70% (per permittee's application).

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's 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 permittees to apply for and obtain a new or modified permit to install and operate 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 material, 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 permit to install and operate.



**2. K006, Pipe painting operation - small line**

**Operations, Property and/or Equipment Description:**

Pipe painting operation with a maximum hourly throughput of 171.89 gallons/hr controlled by a fabric filter with 100% capture and 99.87% control (70% transfer efficiency); this unit was installed in 1983 without an installation permit so this permit imposes BAT limits as well as the federally-enforceable emissions limitations on PM10 requested by the permittee to ensure compliance with facility-wide emission rates protective of the National Ambient Air Quality Standards (NAAQS).

- 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 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(D) (Synthetic minor to ensure compliance with the NAAQS)	PM <sub>10</sub> emissions from the stack shall not exceed 1.21 tons based on a rolling, 12-month summation.
b.	OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) from the stack shall not exceed 0.79 pound per hour.  No visible particulate emissions shall be emitted from the stack serving this emissions unit.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C) and 3745-21-09(U)(1)(d).
c.	OAC rule 3745-21-09(U)(1)(d)	Volatile compound emissions per gallon of coating shall not exceed 3.5 pounds, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.
d.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall operate the dry filtration system whenever this emissions unit is in operation.

*(Authority for term: OAC rule 3745-31-05(A)(3))*

(2) The maximum coating usage for this emissions unit shall not exceed 243,066 gallons, based upon a rolling, 12-month summation of the coating usage figures. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coating usage, upon issuance of this permit.

*(Authority for term: OAC rule 3745-31-05(D))*

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

*(Authority for term: OAC rule 3745-31-05(A)(3))*

(2) The permittee shall collect and record the following information each month for the coating line:

- a. The name and identification number of each coating employed;
- b. the solids content, in pounds per gallon, of each coating employed;
- c. the VOC content of each coating (excluding water and exempt solvents), as applied;
- d. the total volume, in gallons, of each coating employed;
- e. the rolling, 12-month summation of the coating usage; and
- f. the total solids usage [the sum of (b. times d.) for all coatings], in tons.



This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coatings usage rate upon issuance of this permit.

*(Authority for term: OAC rule 3745-31-05(D))*

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-31-05(A)(3))*

- (2) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days following the end of the calendar month.

*(Authority for term: OAC rule 3745-21-09(U)(1)(d))*

- (3) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for PM<sub>10</sub> specified in b)(1). The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-31-05(D))*

- (4) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on coating usage. The quarterly deviation reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

*(Authority for term: OAC rule 3745-31-05(D))*

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:

PM<sub>10</sub> emissions from the stack shall not exceed 1.21 tons per year based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the rolling, 12-month emissions limit shall be determined in accordance with the following method:



$$E = (M) * (1-TE) * (1-CE)$$

where:

E = PM<sub>10</sub> emission rate (tons per month);

M = total coating solids usage rate (tons per month);

TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.70 per application); and

CE = control efficiency of the control equipment (0.9987 for panel filters).

Compliance with the rolling, 12-month emission limit shall be determined by adding the current month to the previous 11 calendar months totals.

b. Emission Limitation:

PE from the stack shall not exceed 0.79 pound per hour.

Applicable Compliance Method:

Compliance with the hourly PE rate of 0.79 pound per hour shall be determined in accordance with the following method:

$$E = (M) * (1-TE) * (1-CE)$$

Where:

E = PE/PM<sub>10</sub> emission rate (in pounds per hour);

M = total coating solids usage rate (in pounds per hour);

TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.70 per application); and

CE = control efficiency of the control equipment (0.9987 for panel filters).

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

Compliance with the tons per year emissions limitation for PE shall be determined in accordance with the following method:

$$E = (M) * (1-TE) * (1-CE)$$



Where:

E = PE rate (tons per month);

M = total coating solids usage rate (tons per month);

TE = transfer efficiency of coating equipment (ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used, 0.70 per application); and

CE = control efficiency of the control equipment (0.9987 for panel filters).

c. Emission Limitation:

No visible particulate emissions shall be emitted from the stack serving this emissions unit.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 22.

d. Emission Limitation:

Volatile compound emissions per gallon of coating shall not exceed 3.5 pounds, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(2). Formulation data or USEPA Method 24 shall be used to determine the volatile compound contents of the coatings.

g) Miscellaneous Requirements

(1) None.



**3. P034, Shell core machine number 4**

**Operations, Property and/or Equipment Description:**

3.85 ton per hour uncontrolled core making machine processing resin-coated sand and equipped with a 3.0 million BTU/hour natural gas-fired process heater; maximum throughput rate of 5,333 tons of resin-coated sand per rolling, 12-month period; federally enforceable restrictions to limit potential VOC emissions; (uncontrolled)

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) g)(1)

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)	Volatile organic compound (VOC) emissions shall not exceed 8.57 pounds per hour.  Particulate emissions (PE) shall not exceed 0.44 pound per hour.  Emissions of particulate matter of 10 microns or less (PM <sub>10</sub> ) shall not exceed 0.39 pound per hour.  For each building or structure housing any emissions source, the permittee shall not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.  The requirements of this rule include compliance with OAC rule 3745-31-05(D).
b.	OAC rule 3745-31-05(D) (Synthetic minor to restrict federally enforceable potential to emit of this emissions unit to accommodate	VOC emissions shall not exceed 6.06 tons per rolling, 12-month period.  PE shall not exceed 0.48 ton per rolling,



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	future projects)	12-month period.  PM <sub>10</sub> emissions shall not exceed 0.44 ton per rolling, 12-month period.  See c)(1) below.
c.	OAC rules 3745-17-07(B) and 3745-17-08(B)	See b)(2)a. below.

(2) Additional Terms and Conditions

a. This facility is located in Coshocton County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.

c) Operational Restrictions

(1) The maximum throughput of this emissions unit shall not exceed 5,333 tons of resin-coated sand based on a rolling, 12-month summation. This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the throughput rate upon issuance of this permit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

- a. the total throughput of resin-coated sand (in tons) of this emissions unit;
- b. the rolling, 12-month summation of throughput of resin-coated sand, in tons (i.e., the throughput for the current month added to the throughput for the previous 11 calendar months);
- c. the rolling, 12-month summation of throughput of core wash, in gallons (i.e., the throughput for the current month added to the throughput of the previous 11 calendar months);
- d. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the core wash throughput, in gallons; and.
- e. the rolling, 12-month summation of the total VOC, PE and PM<sub>10</sub> emissions.



This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the production rates upon issuance of this permit.

- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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 resin-coated sand throughput limitation specified in c)(1); and
  - b. all exceedances of the rolling, 12-month VOC, PE and PM<sub>10</sub> emissions limitations specified in b)(1)b.

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 semiannual written reports that identify:
  - a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - b. all corrective actions taken to minimize or eliminate the visible emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

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

VOC emissions shall not exceed 8.57 pounds per hour.

VOC emissions shall not exceed 6.06 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pounds per hour emissions limitation shall be demonstrated based on the following calculation:

$$\begin{aligned}
 \text{VOC (lbs/hr)} &= [(\text{VOC emissions factor (lbs VOC/ton of sand)} \times \text{maximum hourly throughput capacity of core machine (tons/hr)}) + \\
 &\quad (\text{VOC emissions factor for fuel burning (lbs VOC/million BTU)} \times \text{maximum fuel input capacity of process heater (million BTU/hr)})] \\
 &= [(2.218 \text{ lbs VOC/ton of sand} \times 3.85 \text{ tons sand/hr}) + (0.011 \text{ lbs VOC/million BTU} \times 3.0 \text{ million BTU/hr})] \\
 &= 8.57 \text{ pounds VOC per hour}
 \end{aligned}$$

Where:

2.218 lbs VOC/ton of sand = VOC emissions factor for process (from permittee's application based on vendor-supplied emissions information);

3.85 tons per hour = maximum capacity of core machine;

0.011 lb VOC/million BTU = VOC emissions factor for natural gas fuel burning from AP-42 Table 1.4-2, 7/98 converted from lb/million CF to lb/million BTU; and

3.0 million BTU per hour = maximum natural gas fuel input capacity of process heater



If required, formulation data or USEPA Method 24 may be used to determine the VOC content of the resin-coated sand.

Compliance with the tons per rolling, 12-month period emissions limitation shall be demonstrated based on the following calculation:

$$\text{VOC (tons/rolling, 12-month period)} = \left[ \frac{\text{(actual tons of resin-coated sand used per rolling, 12-month period as determined pursuant to d)(1)b. X VOC emissions factor)} + (0.033 \text{ lb/hr} \times \text{(hourly PTE of process heater)} \times 8,760 \text{ hours/yr}) \right] \times 1 \text{ ton}/2,000 \text{ lbs}$$

b. Emissions Limitations:

PE shall not exceed 0.44 pound per hour.

PE shall not exceed 0.48 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pound per hour emissions limitation shall be demonstrated based on the following calculation:

$$\begin{aligned} \text{PE (lbs/hr)} &= \left[ (\text{PE emissions factor (lb PE/ton of sand)} \times \text{maximum hourly throughput capacity of core machine (tons/hr)} \times (1 - \text{building settling factor}) + (\text{particulate emissions factor for fuel burning (lbs PE/million BTU)} \times \text{maximum fuel input capacity of process heater (million BTU/hr)}) + [\text{PE lb/gal for core wash} \times \text{maximum hourly wash usage in gallons} \times (1 - \text{transfer efficiency}) \times (1 - \text{building settling factor})] \right] \\ &= \left[ (0.35 \text{ lb PE/ton of sand} \times 3.85 \text{ tons sand/hr} \times (1 - 0.70)) + (0.007 \text{ lbs PE/million BTU} \times 3.0 \text{ million BTU/hr}) + [0.38 \text{ lb/gal} \times 0.59 \text{ gal/hr} \times (1 - 0.70) \times (1 - 0.70)] \right] \\ &= 0.44 \text{ pound PE per hour} \end{aligned}$$

Where:

0.35 lb PE/ton of sand = PE emissions factor for process (RACM Table 2.7-1, 9/80);

3.85 tons per hour = maximum capacity of core machine;

70% = control efficiency of building that houses core machine;

0.007 lb PE/million BTU = particulate emissions factor for natural gas fuel burning from AP-42 Table 1.4-2, 7/98 converted from lb/million CF to lb/million BTU;

3.0 million BTU per hour = maximum natural gas fuel input capacity of process heater;



0.38 lb PE/gallon of wash = Refcobar 7502 as applied emissions factor;

0.59 gal/hr = maximum capacity of core wash;

70% = transfer efficiency of core wash; and

70% = control efficiency of building that houses core wash.

Compliance with the ton per rolling, 12-month period emissions limitation shall be demonstrated based on the following calculation:

$$\text{PE (tons/rolling, 12-month period)} = [(\text{actual tons of resin-coated sand used per rolling, 12-month period as determined pursuant to d)(1)b.} \times \text{PE emissions factor} \times (1 - \text{building settling factor})] + [(0.021 \text{ lb/hr (hourly PTE of process heater)} \times 8,760 \text{ hours/yr}) \times 1 \text{ ton/2,000 lbs}] + [0.38 \text{ lb PE/gal} \times 5,197 \text{ gallons (maximum annual wash)} \times (1 - \text{transfer efficiency})] \times (1 - \text{building settling factor})]$$

c. Emissions Limitations:

PM<sub>10</sub> emissions shall not exceed 0.39 pound per hour.

PM<sub>10</sub> emissions shall not exceed 0.44 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the pound per hour emissions limitation shall be demonstrated based on the following calculation:

$$\begin{aligned} \text{PM}_{10} \text{ (lbs/hr)} &= [(\text{PM}_{10} \text{ emissions factor (lb PM}_{10}\text{/ton of sand)} \times \text{maximum hourly throughput capacity of core machine (tons/hr)} \times (1 - \text{building settling factor}) + (\text{particulate emissions factor for fuel burning (lbs PM}_{10}\text{/million BTU)} \times \text{maximum fuel input capacity of process heater (million BTU/hr)})] + [\text{PM}_{10}\text{lb/gal for core wash} \times \text{maximum hourly wash usage in gallons} \times (1 - \text{transfer efficiency}) \times (1 - \text{building settling factor})] \\ &= [(0.30 \text{ lb PM}_{10}\text{/ton of sand} \times 3.85 \text{ tons sand/hr} \times (1 - 0.70)) + (0.007 \text{ lbs PM}_{10}\text{/million BTU} \times 3.0 \text{ million BTU/hr})] + [0.38 \text{ lb/gal} \times 0.59 \text{ gal/hr} \times (1 - 0.70) \times (1 - 0.70)] \\ &= 0.39 \text{ pound PM}_{10} \text{ per hour} \end{aligned}$$

Where:

0.30 lb PM<sub>10</sub>/ton of sand = PM<sub>10</sub> emissions factor for process (RACM Table 2.7-1, 9/80 and PM calculator);



3.85 tons per hour = maximum capacity of core machine;

70% = control efficiency of building that houses core machine;

0.007 lb PM<sub>10</sub>/million BTU = particulate emissions factor for natural gas fuel burning from AP-42 Table 1.4-2, 7/98 converted from lb/million CF to lb/million BTU;

3.0 million BTU per hour = maximum natural gas fuel input capacity of process heater;

0.38 lb PE/gallon of wash = Refcobar 7502 as applied emissions factor;

0.59 gal/hr = maximum capacity of core wash;

70% = transfer efficiency of core wash; and

70% = control efficiency of building that houses core wash.

Compliance with the ton per rolling, 12-month period emissions limitation shall be demonstrated based on the following calculation:

$$\text{PM}_{10} \text{ (tons/rolling, 12-month period)} = [(\text{actual tons of resin-coated sand used per rolling, 12-month period as determined pursuant to d)(1)b.} \times \text{PM}_{10} \text{ emissions factor} \times (1\text{-building settling factor}) + (0.021 \text{ lb/hr (hourly PTE of process heater)} \times 8,760 \text{ hours/yr}) + [\text{PM}_{10} \text{ lb/gal for core wash} \times 5,197 \text{ gallons (maximum annual wash usage)} \times (1\text{- transfer efficiency)} \times (1\text{-building settling factor})] \times 1 \text{ ton}/2,000 \text{ lbs}$$

d. Emissions Limitation:

For each building or structure housing any emissions source, the permittee shall not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

g) Miscellaneous Requirements

- (1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's 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 permittees to apply for and obtain a new or modified permit to install and operate prior to making a "modification" as



**Final Permit-to-Install**  
McWane Ductile - Ohio  
**Permit Number:** P0116276  
**Facility ID:** 0616010006  
**Effective Date:** 12/12/2014

defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new material, 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 permit to install and operate.



**4. P035, Mold Peening**

**Operations, Property and/or Equipment Description:**

Mold peening with a maximum hourly throughput of 3.85 tons/hr; controlled by baghouse 250.G1 with 100% capture and 99% control

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 11/30/01	Particulate emissions (PE) from the stack for P035, P036, P037 and P038 combined shall not exceed 0.01 gr/dscf.  PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.  The requirements of this rule include compliance with OAC rule 3745-17-07(A)(1) and OAC rule 3745-17-11(B).  See b)(2)a. below.
b.	OAC rule 3745-31-05(C), as effective 12/01/06	See b)(2)b. below.
c.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20% as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(B)	PE shall not exceed 4.6 pounds per hour.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265



changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

Permit-to-Install P0116276 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

- i. Use of a baghouse system when this air contaminant source is in operation with 100% capture and a design control efficiency of 0.010 gr/dscf.
- ii. PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.

*(Authority for term: OAC rule 3745-31-05(C))*

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

*(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07)*



e) Reporting Requirements

- (1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. Emissions Limitation:

PE from the stack for P035, P036, P037 and P038 combined shall not exceed 0.01 gr/dscf.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emissions Limitation:

PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.

Applicable Compliance Method:

Compliance with the ton per year limit shall be based upon the following:

$$\text{tons PE/year} = (0.010 \text{ gr/dscf}) \times (\text{flow rate of baghouse (20,000 acfm)}) \times (\text{lb/7,000 gr}) \times (60 \text{ min/hour}) \times (\text{ton/2,000 lbs}) \times (\text{actual hours of operation/year}).$$

c. Emissions Limitation:

Visible PE from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.



d. Emissions Limitation:

PE shall not exceed 4.6 pounds/hour.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

g) Miscellaneous Requirements

(1) None.



**5. P036, Mold blaster**

**Operations, Property and/or Equipment Description:**

Mold blaster with a maximum hourly throughput of 2.40 tons/hr; controlled by baghouse 250.G1 with 100% capture and 99% control

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 11/30/01	Particulate emissions (PE) from the stack for P035, P036, P037 and P038 combined shall not exceed 0.01 gr/dscf.  PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.  The requirements of this rule include compliance with OAC rule 3745-17-07(A)(1) and OAC rule 3745-17-11(B).  See b)(2)a. below.
b.	OAC rule 3745-31-05(C), as effective 12/01/06	See b)(2)b. below.
c.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20% as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(B)	PE shall not exceed 9.7 pounds per hour.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265



changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

Permit-to-Install P0116276 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

- i. Use of a baghouse system when this air contaminant source is in operation with 100% capture and a design control efficiency of 0.010 gr/dscf.
- ii. PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.

*(Authority for term: OAC rule 3745-31-05(C))*

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

*(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07)*



e) Reporting Requirements

- (1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. Emissions Limitation:

PE from the stack for P035, P036, P037 and P038 combined shall not exceed 0.01 gr/dscf.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emissions Limitation:

PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.

Applicable Compliance Method:

Compliance with the ton per year limit shall be based upon the following:

$$\text{tons PE/year} = (0.010 \text{ gr/dscf}) \times (\text{flow rate of baghouse (20,000 acfm)}) \times (\text{lb/7,000 gr}) \times (60 \text{ min/hour}) \times (\text{ton/2,000 lbs}) \times (\text{actual hours of operation/year}).$$

c. Emissions Limitation:

Visible PE from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.



d. Emissions Limitation:

PE shall not exceed 9.7 pounds/hour.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

g) Miscellaneous Requirements

(1) None.



**6. P037, Pipe blowout**

**Operations, Property and/or Equipment Description:**

Pipe blowout with a maximum hourly throughput of 85 tons/hr; controlled by baghouse 250.G1 with 100% capture and 99% control

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 11/30/01	Particulate emissions (PE) from the stack for P035, P036, P037 and P038 combined shall not exceed 0.01 gr/dscf.  PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.  The requirements of this rule include compliance with OAC rule 3745-17-07(A)(1) and OAC rule 3745-17-11(B).  See b)(2)a. below.
b.	OAC rule 3745-31-05(C), as effective 12/01/06	See b)(2)b. below.
b.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20% as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-11(B)	PE shall not exceed 49.7 pounds per hour.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was



revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

Permit-to-Install P0116276 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

- i. Use of a baghouse system when this air contaminant source is in operation with 100% capture and a design control efficiency of 0.010 gr/dscf.
- ii. PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.

*(Authority for term: OAC rule 3745-31-05(C))*

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

*(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07)*



e) Reporting Requirements

- (1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. Emissions Limitation:

PE from the stack for P035, P036, P037 and P038 combined shall not exceed 0.01 gr/dscf.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emissions Limitation:

PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.

Applicable Compliance Method:

Compliance with the ton per year limit shall be based upon the following:

$$\text{tons PE/year} = (0.010 \text{ gr/dscf}) \times (\text{flow rate of baghouse (20,000 acfm)}) \times (\text{lb/7,000 gr}) \times (60 \text{ min/hour}) \times (\text{ton/2,000 lbs}) \times (\text{actual hours of operation/year}).$$

c. Emissions Limitation:

Visible PE from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.



d. Emissions Limitation:

PE shall not exceed 49.7 pounds/hour.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

g) Miscellaneous Requirements

(1) None.



**7. P038, Mold grinder (Delvo No. 2)**

**Operations, Property and/or Equipment Description:**

Mold grinder (Delvo No. 2) with a maximum hourly throughput of 3.60 tons/hr; controlled by baghouse 250.G1 with 100% capture and 99% control

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 11/30/01	Particulate emissions (PE) from the stack for P035, P036, P037 and P038 combined shall not exceed 0.01 gr/dscf.  PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.  The requirements of this rule include compliance with OAC rule 3745-17-07(A)(1) and OAC rule 3745-17-11(B).  See b)(2)a. below.
b.	OAC rule 3745-31-05(C), as effective 12/01/06	See b)(2)b. below.
b.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20% as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-11(B)	PE shall not exceed 7.4 pounds per hour.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265



changes), such that BAT is no longer required by State regulation for NAAQS pollutant emissions less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to OAC rule 3745-31-05, the requirements to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limits/control measures no longer apply.

- b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the SIP.

Permit-to-Install P0116276 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

- i. Use of a baghouse system when this air contaminant source is in operation with 100% capture and a design control efficiency of 0.010 gr/dscf.
- ii. PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.

*(Authority for term: OAC rule 3745-31-05(C))*

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

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

*(Authority for term: OAC rule 3745-31-05(A)(3), OAC rule 3745-77-07)*



e) Reporting Requirements

- (1) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

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. Emissions Limitation:

PE from the stack for P035, P036, P037 and P038 combined shall not exceed 0.01 gr/dscf.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emissions Limitation:

PE from the stack shall not exceed 7.51 tons/year from P035, P036, P037 and P038 combined.

Applicable Compliance Method:

Compliance with the ton per year limit shall be based upon the following:

$$\text{tons PE/year} = (0.010 \text{ gr/dscf}) \times (\text{flow rate of baghouse (20,000 acfm)}) \times (\text{lb/7,000 gr}) \times (60 \text{ min/hour}) \times (\text{ton/2,000 lbs}) \times (\text{actual hours of operation/year}).$$

c. Emissions Limitation:

Visible PE from any stack shall not exceed 20 percent opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.



d. Emissions Limitation:

PE shall not exceed 7.4 pounds/hour.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

g) Miscellaneous Requirements

(1) None.