Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

5/24/2012

Certified Mail

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

Heather Rainwater
Clow Water Systems Company
P. O. Box 6001
2266 South Sixth Street
Coshocton, OH 43812-6001

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0616010006
Permit Number: P0109174
Permit Type: Initial Installation
County: Coshocton

Dear Permit Holder:

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

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

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

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

Sincerely,

Michael W. Ahern

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

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

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Clow Water Systems Company

Facility ID:	0616010006
Permit Number:	P0109174
Permit Type:	Initial Installation
Issued:	5/24/2012
Effective:	5/24/2012

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
Clow Water Systems Company

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 7
9. Reporting Requirements 7
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 9
14. Public Disclosure 9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 10
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 13
1. F065, Large Specialty Shell Core Machine 14
2. F066, Small Specialty Shell Core Machine 22

Authorization

Facility ID: 0616010006
Facility Description: Ductile Iron Pipe and Fittings.
Application Number(s): A0042980, A0043498, A0043688
Permit Number: P0109174
Permit Description: Initial installation permit for a large (3.85 ton per hour) specialty shell core making machine and a small (0.16 ton per hour) specialty shell core making machine
Permit Type: Initial Installation
Permit Fee: $950.00
Issue Date: 5/24/2012
Effective Date: 5/24/2012

This document constitutes issuance to:

Clow Water Systems Company
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 EPA District Office or local air agency responsible for processing and administering your permit:

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0109174
Permit Description: Initial installation permit for a large (3.85 ton per hour) specialty shell core making machine and a small (0.16 ton per hour) specialty shell core making machine

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

Emissions Unit ID:	**F065**
Company Equipment ID:	Large Specialty Shell Core Machine
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F066**
Company Equipment ID:	Small Specialty Shell Core Machine
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

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

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

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

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

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

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

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

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

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

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

2. Severability Clause

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

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

3. General Requirements

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

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

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

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

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

4. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

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

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

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

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

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

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

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

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

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

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

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

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

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

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

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

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

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

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

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

been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southeast District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

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

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

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

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

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

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

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

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

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

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

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. The Ohio EPA has determined that this facility may be subject to the requirements of area source MACT/GACT rules that the Ohio EPA does not have the delegated authority to implement. Although Ohio EPA has determined that an area source MACT (also known as the GACT) may apply, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised that all requirements associated with these rules are in effect and are enforceable by U.S. EPA. For more information on the area source rules, please refer to the follow U.S. EPA website: http://www.epa.gov/ttn/atw/area/arearules.html.

C. Emissions Unit Terms and Conditions

1. F065, Large 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(A)(3), as effective 11/30/01	Volatile organic compound (VOC) emissions shall not exceed 8.57 pounds per hour. Particulate emissions (PE) shall not exceed 0.42 pound per hour. Emissions of particulate matter of 10 microns or less (PM_{10}) shall not exceed 0.37 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). See b)(2)a. below.

b.	OAC rule 3745-31-05(D) (Synthetic minor to restrict federally enforceable potential to emit of this emissions unit to accommodate future projects)	VOC emissions shall not exceed 6.24 tons per rolling, 12-month period. PE shall not exceed 0.39 ton per rolling, 12-month period. PM_{10} emissions shall not exceed 0.35 ton per rolling, 12-month period. See c)(1) below.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b. below.
d.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06 (Voluntary restriction to avoid BAT for VOC)	See b)(2)c. below.
e.	OAC rules 3745-17-07(B) and 3745-17-08(B)	See b)(2)d. below.

(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 requirement 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.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE and PM_{10} emissions from this air contaminant source since the uncontrolled potential to emit for PE and PM_{10} is less than 10 tons/yr.

c. 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 P0109174 for this air contaminant source takes into account the following voluntary restriction (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. The throughput of resin-coated sand processed in this emissions unit shall not exceed 5,500 tons per year; and
ii. VOC emissions shall not exceed 6.24 tons per year.

d. 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_{10}. Therefore, the maximum throughput rate of resin-coated sand shall not exceed 5,500 tons as a rolling, 12-month summation. To ensure compliance during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the throughput levels specified in the following table:

Months(s)	Maximum Cumulative Throughput Rate (Tons)
1-1	458
1-2	917
1-3	1,375
1-4	1,833
1-5	2,291
1-6	2,749
1-7	3,207
1-8	3,665
1-9	4,123
1-10	4,581
1-11	5,039
1-12	5,500

After the first 12 calendar months of operation following the startup of emissions unit F065, compliance with the annual resin-coated sand throughput limitation shall be based upon a rolling, 12-month summation of the resin-coated sand throughput.

d) Monitoring and/or Recordkeeping Requirements

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

a. the resin-coated sand throughput for each month;

b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the resin-coated sand throughput;

c. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative resin-coated sand throughput for each calendar month; and

d. the rolling, 12-month summation of the total VOC, PE and PM_{10} emissions.

(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 throughtput limitation; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative resin-coated sand throughput rates;

b. allexceedences of the rolling, 12-month VOC, PE and PM_{10} 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. any 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 6.24 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:

VOC (lbs/hr) = [(VOC emissions factor (lbs VOC/ton of sand) X maximum hourly throughput capacity of core machine (tons/hr)) + (VOC emissions factor for fuel burning (lbs VOC/million BTU) X maximum fuel input capacity of process heater (million BTU/hr))]
= [(2.218 lbs VOC/ton of sand X 3.85 tons sand/hr) + (0.011 lbs VOC/million BTU X 3.0 million BTU/hr)]
= 8.57 pounds VOC per hour

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:

VOC (tons/rolling, 12-month period) = [(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 lb/hr (hourly PTE of process heater) X 8,760 hours/yr)] X 1 ton/2,000 lbs

b. Emissions Limitations:
PE shall not exceed 0.42 pound per hour.
PE shall not exceed 0.39 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:

PE (lbs/hr) = [(PE emissions factor (lb PE/ton of sand) X maximum hourly throughput capacity of core machine (tons/hr) X (1-building settling factor) + (particulate emissions factor for fuel burning (lbs PE/million BTU) X maximum fuel input capacity of process heater (million BTU/hr)]
= [(0.35 lb PE/ton of sand X 3.85 tons sand/hr X (1-0.70)) + (0.007 lbs PE/million BTU X 3.0 million BTU/hr)]
= 0.42 pound PE per hour

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

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)b. X PE emissions factor X (1-building settling factor) + (0.021 lb/hr (hourly PTE of process heater) X 8,760 hours/yr)] X 1 ton/2,000 lbs

c. Emissions Limitations:
PM_{10} emissions shall not exceed 0.37 pound per hour.
PM_{10} emissions shall not exceed 0.35 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:

PM_{10} (lbs/hr) = [(PM_{10} emissions factor (lb PM_{10}/ton of sand) X maximum hourly throughput capacity of core machine (tons/hr) X (1-building settling factor) + (particulate emissions factor for fuel burning (lbs PM_{10}/million BTU) X maximum fuel input capacity of process heater (million BTU/hr)]
= [(0.30 lb PM_{10}/ton of sand X 3.85 tons sand/hr X (1-0.70)) + (0.007 lbs PM_{10}/million BTU X 3.0 million BTU/hr)]
= 0.37 pound PM_{10} per hour

Where:

0.30 lb PM_{10}/ton of sand = PM_{10} 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_{10}/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; and
3.0 million BTU per hour = maximum natural gas fuel input capacity of process heater

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

PM_{10} (tons/rolling, 12-month period) = [(actual tons of resin-coated sand used per rolling, 12-month period as determined pursuant to d)(1)b. X PM_{10} emissions factor X (1-building settling factor) + (0.021 lb/hr (hourly PTE of process heater) X 8,760 hours/yr)] X 1 ton/2,000 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 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. F066, Small Specialty Shell Core Machine

Operations, Property and/or Equipment Description:

0.16 ton per hour uncontrolled core making machine processing resin-coated sand and equipped with a 1.5 million BTU/hr natural gas-fired process heater

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), as effective 11/30/01	Volatile organic compound (VOC) emissions shall not exceed 0.35 pound per hour and 1.55 tons per year. Fugitive particulate emissions (PE) shall not exceed 0.02 pound per hour and 0.07 ton per year. Emissions of fugitive particulate matter of 10 microns or less (PM_{10}) shall not exceed 0.01 pound per hour and 0.06 ton per year. For each building or structure housing any emissions source, you must 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. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b. below.
c.	OAC rules 3745-17-07(B) and 3745-17-08(B)	See b)(2)c. below.

(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 requirement 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.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC, PE and PM_{10} emissions from this air contaminant source since the uncontrolled potential to emit for VOC, PE and PM_{10} is less than 10 tons/yr.

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) 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 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 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. any 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 0.35 pound per hour and 1.55 tons per year.

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

VOC (lb/hr) = VOC emissions factor X maximum hourly throughput capacity of core machine
= 2.218 lbs VOC/ton of sand X 0.16 ton sand/hr
= 0.35 pound VOC per hour

Where:

2.218 lbs VOC/ton of sand = VOC emissions factor (from permittee's application based on vendor-supplied emissions information)
0.16 ton per hour = maximum capacity of core machine

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 year emissions limitation shall be demonstrated based on the following calculation:

VOC (tons/yr) = lb/hr emissions limitation X hours per year X 1 ton/2,000 lbs
= 0.35 lb/hr X 8,760 hours/yr X 1 ton/2,000 lbs
= 1.55 tons per year

b. Emissions Limitations:
Fugitive PE shall not exceed 0.02 pound per hour and 0.07 ton per year.

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

PE (lb/hr) = PE emissions factor X maximum hourly throughput capacity of core machine X (1-building settling factor)
= 0.35 lb PE/ton of sand X 0.16 ton sand/hr X (1-0.70)
= 0.02 pound PE per hour

Where:

0.35 lb PE/ton of sand = PE emissions factor (RACM Table 2.7-1, 9/80)
0.16 ton per hour = maximum capacity of core machine
70% = control efficiency of building that houses core machine

Compliance with the ton per year emissions limitation shall be demonstrated based on the following calculation:

PE (ton/yr) = lb/hr emissions limitation X hours per year X 1 ton/2,000 lbs
= 0.02 lb/hr X 8,760 hours/yr X 1 ton/2,000 lbs
= 0.07 tons per year

c. Emissions Limitations:
Fugitive PM_{10} emissions shall not exceed 0.01 pound per hour and 0.06 ton per year.

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

PM_{10} (lbs/hr) = PM_{10} emissions factor X maximum hourly throughput capacity of core machine X (1-building settling factor)
= 0.30 lb PM_{10}/ton of sand X 3.85 tons sand/hr X (1-0.70)
= 0.01 pound PM_{10} per hour

Where:

0.30 lb PM_{10}/ton of sand = PM_{10} emissions factor (RACM Table 2.7-1, 9/80)
0.16 ton per hour = maximum capacity of core machine
70% = control efficiency of building that houses core machine

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

PM_{10} (tons/yr) = lb/hr emissions limitation X hours per year X 1 ton/2,000 lbs
= 0.01 lb/hr X 8,760 hours/yr X 1 ton/2,000 lbs
= 0.06 tons per year

d. Emissions Limitation:
For each building or structure housing any emissions source, you must 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 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.