

March 28, 2016

Mr. Corey Kurjian  
Ohio Environmental Protection Agency  
Air Pollution Division  
Northeast District Office  
2110 East Aurora Road  
Twinsburg, Ohio 44087

**Re: City of Orrville's Application for Permit to Install and Comments on Draft PTI**

Dear Mr. Kurjian:

As you are aware, on January 29, 2016, the City of Orrville submitted a Permit to Install (PTI) application for the repowering of Boiler 13 (B004) from coal to natural gas at the Municipal Utility Electric Generation Plant operated by the City of Orrville. This was the second of two PTI applications submitted to fulfill the terms of U.S. EPA's September 16, 2015, Consent Agreement and Final Order (CAFO) with the City of Orrville. Orrville submitted the first PTI application on November 13, 2015, to establish enforceable limits for each of the four boilers and related permit terms.

Orrville appreciates that you decided to issue a single PTI that incorporates both of the PTI applications referenced above. As you know, one of the more complicated provisions of the CAFO addresses a contingency that would allow coal to be burned in Boiler 13 (B004) and for B004 to emit up to 600 additional tons of SO<sub>2</sub> after January 31, 2017, under very limited circumstances. Orrville has determined that it no longer wishes to rely on this contingency, and instead, Orrville requests that this provision be removed from the PTI.

The PTI application also requests a federally enforceable permit term that limits total facility-wide SO<sub>2</sub> emissions to <2,000 tons per year by January 13, 2017. This limit satisfies the exemption from NAAQS modeling as set forth in the Data Requirements Rule for the one-hour SO<sub>2</sub> NAAQS. Orrville also has an obligation under the CAFO to further reduce its facility-wide SO<sub>2</sub> emissions to 1,475 tons per year by January 31, 2017. To simplify the permit, Orrville asks that Ohio EPA make its 1,475 tpy limit effective January 13, 2017 to establish an SO<sub>2</sub> limit that is substantially lower than the Data Requirements Rule threshold.

I have enclosed two attachments that reflect the changes described above. Once these changes are made to the permit, and Orrville has a chance for review, we would like to move forward with the public comment version of the draft permit. Please contact me with any questions.

Sincerely,

*/s/ Douglas A. McWilliams*

Douglas A. McWilliams

DAM/crl  
Enclosures

cc: Jeff Brediger, Orrville Utilities  
Dean Kallenborn, Orrville Utilities



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

12/20/2016

Certified Mail

Mr. Jeff Brediger  
Department of Public Utilities, City of Orrville, Ohio  
207 N Main St  
P.O. Box 107  
Orrville, OH 44667-0107

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
Yes	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

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL  
Facility ID: 0285010188  
Permit Number: P0120280  
Permit Type: Administrative Modification  
County: Wayne

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**
- **What should you do if you notice a spill or environmental emergency?**

**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.

## **What should you do if you notice a spill or environmental emergency?**

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Ohio EPA DAPC, Northeast District Office at (330)963-1200 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: U.S. EPA  
Ohio EPA-NEDO; Canada



## Response to Comments

Facility ID:	0285010188
Facility Name:	Department of Public Utilities, City of Orrville, Ohio
Facility Description:	Municipal Utility Electric Generation Plant
Facility Address:	1100 Perry Street P.O. Box 107 Orrville, OH 44667-0107 Wayne County
Permit:	P0120280, 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 Daily Recorder on 11/03/2016. The comment period ended on 12/03/2016.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

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. Topic: Permit Strategy Write-Up

- a. Comments:
  - i. "...coal-fired "limited use" boilers."
  - ii. "B001, B004, B005, and B006 currently will have the following controlled PTE:
  - iii. "...when operating as limited- use boilers"
- b. Response: Agreed; Permit revised.

### 2. Topic: Standard Terms and Conditions

- a. Comment:
  - i. "Standard Term and Condition A.6.c) Compliance Requirements"
- b. Response: Agreed, this is a typo in a Standard Term and Condition that references compliance requirements. However, the Standard Terms and Conditions are a template document issued



with each permit and cannot readily be changed. The template will be revised for all permits after further discussion at Ohio EPA.

**3. Topic: Emissions Unit Terms and Conditions Comment: B001**

a. Comments:

- i. add *"These Subpart DDDDD terms shall not be applicable earlier than the compliance date."*
- ii. January 31, 2017,"
- iii. "... (calculated by multiplying coal usage by the coal heating value);"
- iv. add *"The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.*

*Each continuous monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.*

*The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.*

*The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments."*

- v. add *"Pursuant to 40 CFR 64.2(b), CAM will not apply to sources subject to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date of that rule. The monitoring requirements specified in 40 CFR sections 63.7525 and 63.7535 will replace the monitoring requirements of 40 CFR Part 64,*
- vi. *"The operating hours and fuels and fuel usage records shall be maintained for each boiler that is operated subcategory as a limited use boiler"*
- vii. *"The permittee shall submit (add: quarterly) reports "These quarterly reports shall be submitted by January 3031, April 30, July 3031, and October 3031 of each year and shall include the following..."*
- viii. *"...any/each malfunction \*\*..." (remove \*\*)*



- ix. Add language in italics "...subcategory (*i.e., not limited use*),..."
- x. "The first compliance report must cover the period beginning 5January 17, 2017 and ending on December 31, 2021. whichever date is the first date that occurs 5 years after the specified compliance date. Unless otherwise approved, The first 5-year compliance report must be postmarked or delivered no later than January 31, 2022. Each subsequent compliance report must be submitted in accordance with the same applicable schedule; , and; cover the applicable 5-year period from January 1 to December 31st of each 5-year period."

b. Response: Agreed; Permit revised.

**4. Topic: Emissions Unit Terms and Conditions Comment: B004**

a. Comments:

- i. "An initial tune-up must be completed for existing units no later than add: *January 31, 2017...*
- ii. "The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limit in sections b(1)d."
- iii. Added the language in italics "...applicability of a different subcategory (*i.e., not Gas 1*),"
- iv. "The permittee shall submit each applicable report in Table 9 to Part 63, Subpart DDDDD by the dates in Table 9. For boilers that are subject only to a requirement to conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12) and not subject to emission limits or operating limits, only a 5-year compliance report is required.

The first compliance report must cover the period beginning on January 31, 2017 and ending on December 31, 2021. Unless otherwise approved, the first 5-year compliance report must be postmarked or submitted no later than January 31, 2022. Each subsequent compliance report must be submitted in accordance with the same applicable schedule, and cover each applicable 5-year reporting period from January 1 -through December 31 of each 5-year period."

b. Response: Agreed; Permit revised.

**5. Topic: Emissions Unit Terms and Conditions Comment: B005 and B006**

a. Comments:

- i. add "*These Subpart DDDDD terms shall not be applicable earlier than the compliance date.*"

This general requirement does not require Orrville to make any further efforts to reduce emissions if the applicable standards have been



- ii. "January 31, 2017,"
  - iii. "... (calculated by multiplying coal usage by the coal heating value);"
  - iv. [Authority for term: OAC rule 3745-77-07(C)(1)
  - v. add "*Pursuant to 40 CFR 64.2(b), CAM will not apply to sources subject to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date of that rule. The monitoring requirements specified in 40 CFR sections 63.7525 and 63.7535 will replace the monitoring requirements of 40 CFR Part 64,*
  - vi. "The operating hours and fuels and fuel usage records shall be maintained for each boiler that is operated as a limited use boiler"
  - vii. "The permittee shall submit (add: *quarterly*) reports following the end of each calendar quarter..."

"These quarterly reports shall be submitted by January 31, April 30, July 31, and October -31 of each year and shall include the following..."
  - viii. "...any/each malfunction ~~\*\*~~..." (remove ~~\*\*~~)
  - ix. Add language in italics "...subcategory (*i.e., not limited use*),..."
  - x. "The first compliance report must cover the period beginning on January 17, 2017 and ending on December 31, 2021. Unless otherwise approved, the first 5-year compliance report must be postmarked or delivered no later than January 31, 2022. Each subsequent compliance report must be submitted in accordance with the same applicable schedule; and, cover the applicable 5-year period from January 1 to December 31st of each 5-year period."
- b. Response: Agreed; Permit revised.





**FINAL**

**Division of Air Pollution Control  
Permit-to-Install  
for**

**Department of Public Utilities, City of Orrville, Ohio**

Facility ID:	0285010188
Permit Number:	P0120280
Permit Type:	Administrative Modification
Issued:	12/20/2016
Effective:	12/20/2016





**Division of Air Pollution Control**  
**Permit-to-Install**  
for  
Department of Public Utilities, City of Orrville, Ohio

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**Final Permit-to-Install**  
Department of Public Utilities, City of Orrville, Ohio  
**Permit Number:** P0120280  
**Facility ID:** 0285010188  
**Effective Date:** 12/20/2016

## Authorization

Facility ID: 0285010188  
Facility Description: Municipal Utility Electric Generation Plant  
Application Number(s): A0054675, A0055283  
Permit Number: P0120280  
Permit Description: Per 40 CFR Part 63, Subpart DDDDD, the facility has requested a PTI Administrative Modification to identify emissions units B001, B005, and B006 as coal-fired "limited use" boilers. In addition, the facility has requested to convert emissions unit B004 from a coal-fired unit to a natural gas-fired boiler. This PTI also is intended to satisfy the terms of US EPA's September 16, 2015, Consent Agreement and Final Order (CAFO) with the City of Orrville.  
Permit Type: Administrative Modification  
Permit Fee: \$3,250.00  
Issue Date: 12/20/2016  
Effective Date: 12/20/2016

This document constitutes issuance to:

Department of Public Utilities, City of Orrville, Ohio  
1100 Perry Street  
P.O. Box 107  
Orrville, OH 44667-0107

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

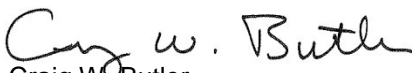
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office  
2110 East Aurora Road  
Twinsburg, OH 44087  
(330)963-1200

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: P0120280

Permit Description: Per 40 CFR Part 63, Subpart DDDDD, the facility has requested a PTI Administrative Modification to identify emissions units B001, B005, and B006 as coal-fired "limited use" boilers. In addition, the facility has requested to convert emissions unit B004 from a coal-fired unit to a natural gas-fired boiler. This PTI also is intended to satisfy the terms of US EPA's September 16, 2015, Consent Agreement and Final Order (CAFO) with the City of Orrville.

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>B001</b>
Company Equipment ID:	Boiler #12
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>B004</b>
Company Equipment ID:	Boiler #13
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>B005</b>
Company Equipment ID:	Boiler #10
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>B006</b>
Company Equipment ID:	Boiler #11
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install**  
Department of Public Utilities, City of Orrville, Ohio  
**Permit Number:** P0120280  
**Facility ID:** 0285010188  
**Effective Date:** 12/20/2016

## **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, Northeast 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, Northeast 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, Northeast 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, Northeast 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, Northeast 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, Northeast 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, Northeast 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.

## **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. On May 19, 2015, the Orrville Department of Public Utilities received a one-year compliance extension for 40 CFR Part 63, Subpart DDDDD. The compliance deadline expires on January 31, 2017. Should the Orrville Department of Public Utilities operate an emissions unit on or after January 31, 2017 without achieving the requirements stated in the CAFO identified in section B.4 of this permit (i.e., convert emissions unit B004 to a natural gas boiler and designate emissions units B001, B005, and B006 as "limited-use" boilers) the emissions unit will be subject to the compliance requirements of 40 CFR Part 63, Subpart DDDDD as identified in the facility's Title V permit (P0107692) issued final on June 2, 2014 with an effective date of June 23, 2014.
3. The Ohio EPA has approved the Compliance Assurance Monitoring (CAM) plan submitted by the permittee, pursuant to 40 CFR Part 64, for emissions units B001, B004, B005 and B006. The permittee shall comply with the provisions of the plan (as specified in Part C - Terms and Conditions for Emissions Units) during any operation of the aforementioned emissions units. The CAM plan will not apply to B004 when combusting only natural gas, as no control device will be needed to meet emission limitations.  
  
Pursuant to 40 CFR 64.2(b), CAM will not apply to sources subject to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date of that rule.
4. On September 16, 2015, the United States Environmental Protection Agency (USEPA), Region 5 issued a Consent Agreement and Final Order (CAFO) which resolves the enforcement action taken against the City of Orrville. The permittee shall comply with the CAFO requirements identified in the following table:

<b>Plant Wide NO<sub>x</sub> and SO<sub>2</sub> Emissions</b>			
<b>Pollutant</b>	<b>Tons Per Year (TPY)</b>	<b>Start Date</b>	<b>End Date</b>
NO <sub>x</sub>	2,050	September 16, 2015	January 30, 2016
SO <sub>2</sub>	8,000		
NO <sub>x</sub>	1,800	January 31, 2016	January 30, 2017
SO <sub>2</sub>	8,000		
NO <sub>x</sub>	490	January 31, 2017	Beyond
SO <sub>2</sub>	1,475 <sup>1</sup>	January 13, 2017	Beyond

<sup>1</sup>This limit will be effective on January 13, 2017, to establish an enforceable limit at or below 2000 tpy SO<sub>2</sub> in accordance with the Data Requirements Rule for the SO<sub>2</sub> NAAQS designation process.



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

**1. Emissions Unit B001, Boiler #12**

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

315.6 MMBtu/hr Pulverized Coal-Fired Boiler No. 12

- 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(D)	Particulate emissions (PE) (filterable) shall not exceed 0.065 lb/MMBtu, on a three-hour average emission rate basis.
b.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-10(C)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(D).
d.	OAC rule 3745-18-91(E)	Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 7.0 lbs/MMBtu of actual heat input.
e.	40 CFR Part 64, Compliance Assurance Monitoring (CAM) Rule	See d)(3).
f.	OAC rule 3745-110-03	The requirements of the nitrogen oxides (NO <sub>x</sub> ) RACT rule are not applicable to this source as it is located in Wayne County, which is not one of the counties listed in OAC rule 3745-110-02(A)(1).
g.	40 CFR Part 63, Subpart DDDDD (40 CFR 63.7480 – 63.7575)  [In accordance with 40 CFR 63.7500(c) this emissions unit is a limited-use boiler subject to the tune-up requirements specified in this section.]	See b)(2)a through b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	40 CFR 63.1 – 63.16  (40 CFR 63.7565)	Table 10 to Subpart DDDDD of 40 CFR Part 63 – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

- a. On May 19, 2015, the Orrville Department of Public Utilities received a one-year compliance extension for 40 CFR Part 63, Subpart DDDDD. The compliance date is now January 31, 2017. These Subpart DDDDD terms and conditions shall not be applicable earlier than the compliance date.

At all times, the permittee must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. This general requirement does not require Orrville to make any further efforts to reduce emissions if the applicable standards have been achieved or to operate the ESP when burning solely natural gas.

[Authority for term: 40 CFR 63.6(e)(6); 40 CFR 63.7500(a)(1) and (2); and 40 CFR 63.7495]

- b. This emissions unit shall comply with the requirements for a “limited-use boiler” as defined in 40 CFR 63.7575, beginning January 31, 2017, as follows:
- i. This emissions unit is identified as a limited-use boiler and is not subject to the emission limits in Table 2 of the subpart, the operating limits in Table 4 of the subpart, or the energy assessment requirements in Table 3 of the subpart.
  - ii. The limited-use boiler is subject to 5-year tune-up requirements, conducted in accordance with 40 CFR 63.7540(a)(10)(i) through (vi) and Table 3 to the subpart.
- c. An initial tune-up must be completed for existing units no later than January 31, 2017, unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable 5-year schedule as specified in 40 CFR 63.7500(a)-(c), 40 CFR 63.7540(a)(10) through (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent tune-up must occur no more than 61 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler.

Each tune-up conducted to demonstrate compliance with the requirements of 40 CFR Part 63, Subpart DDDDD shall include the following elements as applicable:

- i. inspection of the burner(s) (and requirement to clean or replace any necessary components);
- ii. inspection of the flame pattern and requirement to adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications if applicable;
- iii. inspect the air-to-fuel ratio control system to ensure it is correctly calibrated and functioning properly;
- iv. optimize total emissions of CO, in correlation with any applicable NO<sub>x</sub> standards, consistent with the manufacturer's specification if applicable;
- v. measure the concentration of CO (in ppm, by volume) and oxygen (in volume percent) in the effluent gas stream, at the high-fire or typical operating load, and both before and after any adjustments (measurements can be made using a portable CO analyzer);
- vi. maintain records of the tune-up, inspection, and any corrective actions taken; and
- vii. where more than one type of fuel is used, records of the type and amount of each fuel type burned over the 12 months prior to the tune-up.

c) Operational Restrictions

- (1) Beginning on the compliance date January 31, 2017, the maximum annual heat input for this emissions unit shall not exceed 276,465.6 MMBtu, based upon a rolling, 12-month summation of the monthly heat input values.

[Authority for term: OAC rule 3745-31-05(D)(1) and 40 CFR 63.7575]

- (2) The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limitation in section b)(1).

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of heat input utilizing the following procedures:
  - a. Coal burn derived heat input:
    - i. the fuel usage of coal for emissions unit B001, in pounds;
    - ii. the heat input rate for emissions unit B001, in MMBtu (calculated by multiplying coal usage by the coal heating value); and

- iii. the rolling, 12-month summation of the monthly heat input rate, in MMBtu.
- (2) The permittee shall maintain monthly records of the total quantity of coal received, and the results of the analyses for ash content, sulfur content, and heat content.

The permittee shall collect a representative sample of each shipment of coal which is received for burning. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and

ASTM Method D5865, Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval from the Ohio EPA, Northeast District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office verifying that the continuous opacity monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

- (5) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions, until the compliance date in 40 CFR Part 63, Subpart DDDDD, are the opacity of the visible particulate emissions from the electrostatic precipitator exhaust stack and the electrostatic precipitator power parameters (secondary amperage and secondary voltage) indicator ranges.

Stack opacity is measured and recorded by the certified continuous opacity monitoring (COM) system. The visible particulate emissions indicator range is each six-minute block average with an opacity value greater than 15%. When the opacity value is greater than 15%, corrective action (including, but not limited to, an evaluation of the emissions unit and electrostatic precipitator) will be required.

The electrostatic precipitator may be evaluated by checking the power parameters (secondary amperage and secondary voltage) for the ESP's three fields to ensure that they are operating within the indicator ranges below on an hourly average basis. The electrostatic precipitator power parameter indicator ranges for normal operation are:

For emissions unit B001:

Parameter and Range

Secondary Current 144 – 960 milli-amps

Secondary Voltage 12.7 - 63.7 kilovolts

When the opacity exceeds 15% for more than six consecutive minutes and the hourly average of one of the power parameters is outside of the indicator ranges above, additional corrective action focused on the ESP will be required. When opacity exceeds 15% for more than six consecutive minutes and the hourly averages for the power parameters are within the indicator ranges above, corrective action focused on the emission unit will be required.

Upon detecting an excursion of the visible particulate emission value above 15% opacity, the owner or operator shall restore operation of the emissions unit (including the control device) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be

required to develop a Quality Improvement Plan (QIP) consistent with the requirements 40 CFR Part 64.

Pursuant to 40 CFR 64.2(b), CAM will not apply to sources subject to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date of that rule. The monitoring requirements specified in 40 CFR sections 63.7525 and 63.7535 will replace the monitoring requirements of 40 CFR Part 64.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (6) To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the ESP (a) during all periods of start-up until ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) during all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic copy or hardcopy record of the temperature during periods of start-up and shutdown shall be maintained.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) The permittee shall maintain records of the following information for the boiler(s) in order to meet the record keeping requirement of 40 CFR 63.7525, 40 CFR 63.7555, 40 CFR 63.10(b) and to demonstrate compliance with Subpart DDDDD:
- a. A copy of each notification and report that is submitted to comply with Part 63 Subpart DDDDD, including all documentation supporting the Initial Notification and subsequent Notifications of Compliance Status and/or semiannual compliance reports, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
  - b. The operating hours and fuels and fuel usage records shall be maintained for each boiler that is operated as a limited-use boiler. A copy of the federally enforceable permit restricting the annual capacity factor to no more than 10% shall also be retained.

These records shall be retained in a form suitable and readily available for expeditious review for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records must be accessible from on-site for at least two years after the date of the record and may be located off-site for the remaining three years.

[Authority for term: 40 CFR 63.7540(a), 40 CFR 63.7555 and 40 CFR 63.7560]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all exceedances of the rolling, 12-month heat input limitation for emissions unit B001.

The quarterly deviation (excursion) 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)]

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

- a. The permittee shall submit quarterly reports to Ohio EPA's Northeast District Office, documenting all instances of opacity values in excess of any limitation specified in this permit, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance.

- b. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include the following:

- i. the facility name and address;
- ii. the manufacturer and model number of the continuous opacity monitor;
- iii. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
- iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
- v. the total operating time (hours) of the emissions unit;
- vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
- vii. the date, time, and duration of any/each malfunction of the continuous opacity monitoring system, emissions unit, and/or control equipment;
- viii. the date, time, and duration of any downtime\*\* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and



- ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* where no exceedance of the opacity limit has occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the quarterly EER report

\*\* each downtime event shall be reported regardless of whether there is an exceedance of the opacity limit

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA, Northeast District Office documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).
- (4) Quarterly reports shall be submitted concerning the quality and quantity of coal received for burning in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
- a. the total quantity of coal received (tons);
  - b. the average ash content (percent) of the coal received;
  - c. the average sulfur content (percent) of the coal received;
  - d. the average heat content (Btu/pound) of the coal received; and
  - e. the average SO<sub>2</sub> emissions rate (pounds SO<sub>2</sub>/MMBtu actual heat input) from the coal received.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the data obtained during the previous calendar quarters.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall submit, to the Ohio EPA, Northeast District Office, the following notifications in accordance with the applicable requirements of 40 CFR 63.7545 and 40 CFR 63.9(b)
- a. The Initial Notification of Compliance shall be submitted according to 40 CFR 63.9(h)(2)(ii) and the notification must be submitted before the close of business on the 60<sup>th</sup> day following the completion of all initial compliance demonstrations according to 40 CFR 63.10(d)(2). The initial Notification of Compliance Status report must contain the following information:

- i. A description of the facility boilers including
  - (a) Identification of the subcategory each boiler is in;
  - (b) The design heat input capacity of the/each unit;
  - (c) A description of the add-on controls used on each boiler to comply with Subpart DDDDD;
  - (d) Description of the fuel(s) burned;
  - (e) Identification of fuel(s) that were determined to be non-waste or fuel(s) processed from discarded non-hazardous secondary materials under 40 CFR 241.3; and
  - (f) The justification for the selection of fuel(s) burned during the compliance demonstration;
- ii. A signed certification that all applicable emission limits and work practice standards have been met;
- iii. A description of any deviation(s) from an emission limit, work practice standard, or operating limit, the duration of the deviation, and the corrective action taken;
- iv. The following certification(s) of compliance, as applicable must be signed by a responsible official:
  - (a) Certification that the facility has complied with the required initial tune-up in accordance with 40 CFR 63.7540(a)(10)(i) through (vi); and
  - (b) Except for boilers burning natural gas, refinery gas, or other gas 1 fuel, certification that no secondary materials that are solid waste were combusted in any affected unit.
- b. If there are any plans to commence or recommence combustion of solid waste, notification must be made at least 30 days prior to the date combustion of solid waste will commence or recommence. The notification must identify:
  - i. the name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that will commence burning solid waste, and the date of the notice;
  - ii. the currently applicable subcategories under this subpart;
  - iii. the date on which you became subject to the currently applicable emission limits; and
  - iv. the date upon which you will commence combusting solid waste.

- c. If there has been a fuel switch or physical change to a boiler, and this fuel switch or change to the boiler has resulted in the applicability of a different subcategory (i.e., not limited use), notification of the switch must be made within 30 days of the switch or change. This notification must identify:
  - i. the name of owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that have switched fuels or were physically changed;
  - ii. the currently applicable subcategory of the boiler(s);
  - iii. the date on which the fuel switch or physical change occurred; and
  - iv. the date of the notice.
- (6) The permittee shall submit each applicable report in Table 9 to 40 CFR Part 63, Subpart DDDDD by the dates in Table 9. For boilers that are subject only to a requirement to conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12), and not subject to emission limits or operating limits, only a 5-year compliance report is required.

The first compliance report must cover the period beginning January 17, 2017 and ending on December 31, 2021. The first 5-year compliance report must be postmarked or delivered no later than January 31, 2022. Each subsequent compliance report must be submitted in accordance with the same applicable schedule, and cover the applicable 5-year period from January 1 to December 31st of each 5-year period.

[Authority for term: 40 CFR 63.7550(a),(b)]
- (7) The compliance reports for 40 CFR Part 63, Subpart DDDDD must contain the following information as applicable for each boiler, as provided in 40 CFR 63.7550(c)(1) – (c)(4):
  - a. a company and facility name and address;
  - b. process unit information, emissions limitations, and operating parameter limitations;
  - c. the date of report and beginning and ending dates of the reporting period;
  - d. the total operating time during the reporting period;
  - e. the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(12); and include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period, as applicable, and was delayed until the next scheduled or unscheduled shutdown; and
  - f. a statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[Authority for term: 40 CFR 63.7550(a) through (d), 40 CFR Subpart DDDDD Table 9]

f) Testing Requirements

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

a. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Ongoing compliance with the opacity limitation contained in this permit, shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit.

If required, compliance with the visible PE limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-17-07(A)]

b. Emission Limitation:

PE (filterable) shall not exceed 0.065 lb/MMBtu of actual heat input, on a 3-hour average emission rate basis.

Applicable Compliance Method:

Compliance with the emission limitation shall be demonstrated through the particulate emission testing required in f)(2).

[Authority for term: OAC rule 3745-17-10(C)]

c. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 7.0 lbs/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be demonstrated based upon the fuel analysis records required pursuant to section d)(2) and the applicable equation in OAC rule 3745-18-04(F).

If required, compliance with the SO<sub>2</sub> emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 and the procedures in OAC rule 3745-18-04(D).

[Authority for term: OAC rule 3745-18-91(E)]

- (2) As long as emissions unit B001 is designated as a limited-use boiler per 40 CFR Part 63, Subpart DDDDD, the permittee shall conduct, or have conducted, particulate emission testing to demonstrate compliance with the allowable particulate emission rate in section b)(1)a in accordance with the following requirements:
- a. The testing of emissions unit B001 as a limited-use boiler shall be conducted on 5-year intervals with the next required test to be performed no later than September 30, 2020.
  - b. Compliance with the allowable mass emission rate for particulate emissions shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03(B)(9).
  - c. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.
  - d. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).
  - e. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
  - f. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

[Authority for term: OAC rule 3745-17-03(B)(9)]

g) **Miscellaneous Requirements**

- (1) None.

**2. Emissions Unit B004, Boiler #13**

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

365.4 MMBtu/hr Pulverized Coal-Fired Boiler No. 13

- 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(D)	<p>Particulate emissions (PE) (filterable) shall not exceed 0.010 lb/MMBtu on a 3-hour average emission rate basis once emissions unit B004 is repowered to natural gas<sup>1</sup>.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.010 lb/MMBtu on a monthly average emission rate basis once emissions unit B004 is repowered to natural gas<sup>1</sup>.</p> <p>Nitrogen dioxide (NO<sub>x</sub>) emissions shall not exceed 0.170 lb/MMBtu on a monthly average emission rate basis<sup>2</sup> once emissions unit B004 is repowered to natural gas<sup>1</sup>.</p>
b.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-10(C)	<p>PE shall not exceed 0.17 lb/MMBtu of actual heat input.</p> <p>The PE limitation specified by this rule is less stringent than the PE limitation established in OAC rule 3745-31-05(D) once emissions unit B004 is repowered to natural gas.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-18-91(E)	SO <sub>2</sub> emissions shall not exceed 7.0 lbs/MMBtu of actual heat input.  The SO <sub>2</sub> limitation specified by this rule is less stringent than the SO <sub>2</sub> limitation established in OAC rule 3745-31-05(D) once emissions unit B004 is repowered to natural gas <sup>1</sup> .
e.	40 CFR Part 64, Compliance Assurance Monitoring (CAM) Rule	See d)(3).
f.	OAC rule 3745-110-03	The requirements of the NO <sub>x</sub> RACT rule are not applicable to this source as it is located in Wayne County, which is not one of the counties listed in OAC rule 3745-110-02(A)(1).
g.	40 CFR Part 63, Subpart DDDDD, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters. (applicability 40 CFR 63.7485; affected source, 40 CFR 63.7490)	See b)(2)a through b)(2)c.
h.	40 CFR 63.1 – 63.16  (40 CFR 63.7565)	Table 10 to Subpart DDDDD of 40 CFR Part 63 – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 – 63.16 apply.

<sup>1</sup>The required implementation date of emissions unit B004 to be repowered to natural gas is January 31, 2017.

<sup>2</sup>The emission limitation is based on the Best Available Technology (BAT) analysis for natural gas burner emission rate that was not required under any law or regulation but conducted and approved by the Ohio EPA on May 22, 2015, in compliance with the CAFO settlement process.

(2) Additional Terms and Conditions

- a. On May 19, 2015, the Orrville Department of Public Utilities received a one-year compliance extension for 40 CFR Part 63, Subpart DDDDD. The compliance date is now January 31, 2017. These Subpart DDDDD terms shall not be applicable earlier than the compliance date. Should the Orrville Department of Public Utilities continue to combust coal in B004 after January 31, 2017, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD for pulverized coal-fired boilers or limited-use units.

At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. This general requirement does not require Orrville to make any further efforts to reduce emissions if the applicable standards have been achieved or to operate the ESP when burning solely natural gas.

[Authority for term: 40 CFR 63.6(e)(6); 40 CFR 63.7500(a)(1) and (2); and 40 CFR 63.7495]

- b. For each existing boiler other than limited-use units, a one-time energy assessment must be performed by a qualified energy assessor no later than the compliance date specified above. The one-time energy assessment for existing units must include the following, but need not exceed the number of technical hours provided for the energy assessment in 40 CFR 63.7575:
  - i. a visual inspection of the boiler system;
  - ii. an evaluation of operating characteristics of the boiler systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints;
  - iii. an inventory of major energy use systems consuming energy from affected boilers, which are under the control of the boiler operator;
  - iv. a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;
  - v. a review of the facility's energy management practices and recommendations for improvements consistent with the definition of energy management practices, if identified;
  - vi. a list of cost-effective energy conservation measures that are within the permittee's control;
  - vii. a list of the energy savings potential of the energy conservation measures identified; and
  - viii. a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping these investments.

[Authority for term: 40 CFR 63.7510(e) and (j) and Part 63, Subpart DDDDD, Table 3 #4]

- c. An initial tune-up must be completed for existing units no later than January 31, 2017, unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable 5-year schedule as specified in 40 CFR 63.7500(a)-(c), 40 CFR 63.7540(a)(10)



through (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent tune-up must occur no more than 61 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler.

Each tune-up conducted to demonstrate compliance with the requirements of 40 CFR Part 63, Subpart DDDDD shall include the following elements as applicable:

- i. inspection of the burner(s) (and requirement to clean or replace any necessary components);
- ii. inspection of the flame pattern and requirement to adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications if applicable;
- iii. inspect the air-to-fuel ratio control system to ensure it is correctly calibrated and functioning properly;
- iv. optimize total emissions of CO, in correlation with any applicable NO<sub>x</sub> standards, consistent with the manufacturer's specification if applicable;
- v. measure the concentration of CO (in ppm, by volume) and oxygen (in volume percent) in the effluent gas stream, at the high-fire or typical operating load, and both before and after any adjustments (measurements can be made using a portable CO analyzer);
- vi. maintain records of the tune-up, inspection, and any corrective actions taken; and
- vii. where more than one type of fuel is used, records of the type and amount of each fuel type burned over the 12 months prior to the tune-up.

[Authority for term: 40 CFR 63.7500(a)-(e), 40 CFR 63.7510(e) and (j), 40 CFR 63.7515(d) and (g), 40 CFR 63.7540(a)(10) through (13), and 40 CFR Part 63, Subpart DDDDD, Table 3]

[Authority for term: 40 CFR Part 63, Subpart DDDDD Table 10]

c) Operational Restrictions

- (1) The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limit in section b(1)d.
- (2) By no later than January 31, 2017, Orrville will permanently cease coal firing, remove all coal burners and sever all coal delivery systems from operation for emissions unit B004.
- (3) Prior to operating emissions unit B004 after January 31, 2017, Orrville will install new low NO<sub>x</sub> natural gas fired burners and combust only natural gas in emissions unit B004.

d) Monitoring and/or Recordkeeping Requirements

- (1) Until repowering to natural gas is complete and permanent, the permittee shall maintain monthly records of the total quantity of coal received, and the results of the analyses for ash content, sulfur content, and heat content.

The permittee shall collect a representative sample of each shipment of coal which is received for burning. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and

ASTM Method D5865, Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval from the Ohio EPA, Northeast District Office.

- (2) Until repowering to natural gas is complete and permanent, the permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (3) These CAM requirements do not apply when burning natural gas. The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions are the opacity of the visible particulate emissions from the electrostatic precipitator exhaust stack and the electrostatic precipitator power parameters (secondary amperage and secondary voltage) indicator ranges.

Stack opacity is measured and recorded by the certified continuous opacity monitoring (COM) system. The visible particulate emissions indicator range is each six-minute block

average with an opacity value greater than 15%. When the opacity value is greater than 15%, corrective action (including, but not limited to, an evaluation of the emissions unit and electrostatic precipitator) will be required.

The electrostatic precipitator may be evaluated by checking the power parameters (secondary amperage and secondary voltage) for the ESP's three fields to ensure that they are operating within the indicator ranges below on an hourly average basis. The electrostatic precipitator power parameter indicator ranges for normal operation are:

For emissions unit B004:

Parameter and Range

Secondary Current 35 – 400 milli-amps

Secondary Voltage 12 - 60 kilovolts

When the opacity exceeds 15% for more than six consecutive minutes and the hourly average of one of the power parameters is outside of the indicator ranges above, additional corrective action focused on the ESP will be required. When opacity exceeds 15% for more than six consecutive minutes and the hourly averages for the power parameters are within the indicator ranges above, corrective action focused on the emission unit will be required.

Upon detecting an excursion of the visible particulate emission value above 15% opacity, the owner or operator shall restore operation of the emissions unit (including the control device) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements 40 CFR Part 64.

Pursuant to 40 CFR 64.2(b), CAM will not apply to sources subject to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date of that rule.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (4) Until repowering to natural gas is complete and permanent, to obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases

entering the ESP (a) during all periods of start-up until ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) during all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic copy or hardcopy record of the temperature during periods of start-up and shutdown shall be maintained.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (5) Once repowering to natural gas is complete and permanent, the permittee shall maintain records of the monthly average emission rates of PE (filterable), NO<sub>x</sub> and SO<sub>2</sub>, in lb/MMBtu, calculated in accordance with the following:
- Sum the total pounds of pollutant emitted from the unit each calendar month;
  - Sum the total heat input to the unit in MMBtu for each calendar month;
  - Divide the total pounds of the pollutant emitted during the calendar month by the total MMBtu of heat input during the calendar month.
  - A new Monthly Average Emission Rate shall be calculated for each new calendar month and shall include all emissions that occur during all periods within any calendar day on which the unit fires fossil fuel.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D)]

- (6) The permittee shall maintain records of the following information for the boiler(s) in order to meet the record keeping requirement of 40 CFR 63.7525, 40 CFR 63.7555, 40 CFR 63.10(b) and to demonstrate compliance with Subpart DDDDD:
- A copy of each notification and report that is submitted to comply with Part 63 Subpart DDDDD, including all documentation supporting the Initial Notification and subsequent Notifications of Compliance Status and/or semiannual compliance reports, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

These records shall be retained in a form suitable and readily available for expeditious review for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records must be accessible from on-site for at least two years after the date of the record and may be located off-site for the remaining three years.

[Authority for term: 40 CFR 63.7540(a), 40 CFR 63.7555 and 40 CFR 63.7560]

- (7) If burning an alternative fuel in a boiler designed to burn gas 1 (subcategory) fuels, i.e., fuels other than natural gas, refinery gas, gaseous fuels subject to another subpart of Part 60, 61, 63, or 65, or other gas 1 fuel, the records of the total hours per calendar year that

the alternative fuel was burned and the total hours per calendar year that the boiler operated during periods of gas curtailment or gas supply emergencies;

These records shall be retained in a form suitable and readily available for expeditious review for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records must be accessible from onsite for at least two years after the date of the record and may be located off-site for the remaining three years.

[Authority for term: 40 CFR 63.7540(a), 40 CFR 63.7555 and 40 CFR 63.7560]

e) Reporting Requirements

- (1) Until repowering to natural gas is complete and permanent, the permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA, Northeast District Office documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (2) Until emissions unit B004 is repowered to natural gas, quarterly reports shall be submitted concerning the quality and quantity of coal received for burning in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
  - a. the total quantity of coal received (tons);

- b. the average ash content (percent) of the coal received;
- c. the average sulfur content (percent) of the coal received;
- d. the average heat content (Btu/pound) of the coal received; and
- e. the average SO<sub>2</sub> emissions rate (pounds SO<sub>2</sub>/MMBtu actual heat input) from the coal received.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the data obtained during the previous calendar quarters.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit, to the Ohio EPA, Northeast District Office, the following notifications in accordance with the applicable requirements of 40 CFR 63.7545 and 40 CFR 63.9(b)
  - a. The Initial Notification of Compliance shall be submitted according to 40 CFR 63.9(h)(2)(ii) and the notification must be submitted before the close of business on the 60<sup>th</sup> day following the completion of all initial compliance demonstrations according to 40 CFR 63.10(d)(2). The initial Notification of Compliance Status report must contain the following information:
    - i. A description of the facility boilers including
      - (a) Identification of the subcategory each boiler is in;
      - (b) The design heat input capacity of the/each unit;
      - (c) A description of the add-on controls used on each boiler to comply with Subpart DDDDD;
      - (d) Description of the fuel(s) burned;
      - (e) Identification of fuel(s) that were determined to be non-waste or fuel(s) processed from discarded non-hazardous secondary materials under 40 CFR 241.3; and
      - (f) The justification for the selection of fuel(s) burned during the compliance demonstration;
    - ii. A signed certification that all applicable emission limits and work practice standards have been met;
    - iii. A description of any deviation(s) from an emission limit, work practice standard, or operating limit, the duration of the deviation, and the corrective action taken;
    - iv. The following certification(s) of compliance, as applicable must be signed by a responsible official:

- (a) Certification that the facility has complied with the required initial tune-up in accordance with 40 CFR 63.7540(a)(10)(i) through (vi);
  - (b) Certification that the facility has completed a one-time energy assessment performed according to 40 CFR 63.7530(e) and that it is an accurate depiction of the facility at the time of the assessment;
  - (c) Except for boilers burning natural gas, refinery gas, or other gas 1 fuel, certification that no secondary materials that are solid waste were combusted in any affected unit
- b. If the unit is in the subcategory designed to burn natural gas, refinery gas, or other gas 1 fuels, and there are plans to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of this part, Part 60, 61, or 65, or other gas 1 fuel during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, a notification of alternative fuel use must be submitted within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification must include the following information:
  - i. facility name and address;
  - ii. identification of the affected unit(s);
  - iii. the reason natural gas or equivalent fuel cannot be used;
  - iv. the date when the natural gas curtailment was declared or the natural gas supply interruption began;
  - v. the type of alternative fuel to be used; and
  - vi. the dates when the alternative fuel use is expected to begin and end.
- c. If there are any plans to commence or recommence combustion of solid waste, notification must be made at least 30 days prior to the date combustion of solid waste will commence or recommence. The notification must identify:
  - i. the name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that will commence burning solid waste, and the date of the notice;
  - ii. the currently applicable subcategories under this subpart;
  - iii. the date on which you became subject to the currently applicable emission limits; and
  - iv. the date upon which you will commence combusting solid waste.
- d. If there has been a fuel switch or physical change to a boiler, and this fuel switch or change to the boiler has resulted in the applicability of a different subcategory (i.e., not Gas 1), notification of the switch must be made within 30 days of the switch or change. This notification must identify:

- i. the name of owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that have switched fuels or were physically changed;
  - ii. the currently applicable subcategory of the boiler(s);
  - iii. the date on which the fuel switch or physical change occurred; and
  - iv. the date of the notice.
- (4) The permittee shall submit each applicable report in Table 9 to Part 63, Subpart DDDDD by the dates in Table 9. For boilers that are subject only to a requirement to conduct a 5-year tune-up according to 40 CFR 63.7540(a) (12) , and not subject to emission limits or operating limits, only a 5-year compliance report is required.

The first compliance report must cover the period beginning on January 31, 2017 and ending on December 31, 2021. Unless otherwise approved, the first 5-year compliance report must be postmarked or submitted no later than January 31, 2022. Each subsequent compliance report must be submitted in accordance with the same applicable schedule and cover the applicable 5-year reporting period from January 1 through December 31 of each 5-year period.

[Authority for term: 40 CFR 63.7550(a),(b)]

- (5) The compliance reports shall include the information identified in 40 CFR 63.7500(c) - (e). The compliance reports for 40 CFR Part 63, Subpart DDDDD must contain the following information as applicable for each boiler, as provided in 40 CFR 63.7550(c)(1) – (c)(4):
- a. a company and facility name and address;
  - b. process unit information, emissions limitations, and operating parameter limitations;
  - c. the date of report and beginning and ending dates of the reporting period;
  - d. the total operating time during the reporting period;
  - e. the date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12); and include the date of the most recent burner inspection if it was not done on a 5-year period, as applicable, and was delayed until the next scheduled or unscheduled shutdown; and
  - f. a statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[Authority for term: 40 CFR 63.7550(a) through (d), 40 CFR Subpart DDDDD Table 9]

f) Testing Requirements



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

a. Emission Limitations:

PE shall not exceed 0.17 lb/MMBtu of actual heat input.

For emissions unit B004, PE (filterable) shall not exceed 0.010 lb/MMBtu on a 3-hour average emission rate basis once emissions unit B004 is repowered to natural gas.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PE (filterable) limit of 0.010 lb/MMBtu using fuel use records and AP-42 emission factors for natural gas combustion.

b. Emission Limitations:

SO<sub>2</sub> emissions shall not exceed 7.0 lbs/MMBtu of actual heat input except when burning natural gas as indicated below.

For emissions unit B004, SO<sub>2</sub> emissions shall not exceed 0.010 lb/MMBtu on a monthly average emission rate basis once emissions unit B004 is repowered to natural gas.

Applicable Compliance Method:

Compliance may be determined by using the fuel analysis records required pursuant to section d)(1) and the applicable equation in OAC rule 3745-18-04(F).

If required, the permittee shall demonstrate compliance with the applicable allowable mass emission rate of either 7.0 lbs/MMBtu or 0.010 lb/MMBtu (when burning natural gas) of actual heat input in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 and the procedures in OAC rule 3745-18-04(D).

c. Emission Limitation:

For emissions unit B004, NO<sub>x</sub> emissions shall not exceed 0.170 lb/MMBtu on a monthly average emission rate basis once B004 has been repowered to natural gas.

Applicable Compliance Method:

Compliance with the emission limitation shall be demonstrated through the particulate emission testing required in f)(2).

d. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Ongoing compliance with the opacity limitation contained in this permit and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit.

[Authority for term: OAC rule 3745-17-07(A)]

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

- a. A compliance test shall be performed within 12 months of emissions unit B004's repowering to natural gas. Subsequent compliance tests shall be performed annually thereafter, unless Orrville is otherwise required to install and continuously operate a NO<sub>x</sub> continuous emissions monitoring system. Testing frequency shall be reduced to once every two years if the results of two consecutive annual stack tests demonstrate that B004's NO<sub>x</sub> emissions are at or below 65% of the NO<sub>x</sub> limit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable concentration of NO<sub>x</sub> in the exhaust stream.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for NO<sub>x</sub>: Methods 1 through 4 and 7 in 40 CFR Part 60, Appendix A.

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

- d. Each test shall consist of three separate runs performed under representative operating conditions. The sampling time for each run shall be at least 60 minutes and the volume of each run shall be at least 0.85 dry standard cubic meters (30 dry standard cubic feet).
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).
- f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

[Authority for term: OAC rule 3745-17-03(B)(9)]

- g) Miscellaneous Requirements
  - (1) None.

**3. Emissions Unit Group – Stoker Coal Boilers: B005 and B006**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
B005	110.9 MMBtu/hr Stoker Type, Coal-Fired Boiler No. 10
B006	170 MMBtu/hr Stoker Type, Coal-Fired Boiler No. 11

- 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.

	<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
a.	OAC rule 3745-31-05(D)	Particulate emissions (PE) (filterable) shall not exceed 0.065 lb/MMBtu, on a 3-hour average emission rate basis.
b.	OAC rule 3745-17-07(A)	Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
c.	OAC rule 3745-17-10(C)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(D).
d.	OAC rule 3745-18-91(E)	Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 7.0 lbs/MMBtu of actual heat input.
e.	40 CFR Part 64, Compliance Assurance Monitoring (CAM) Rule	See d)(4).
f.	OAC rule 3745-110-03	The requirements of the nitrogen oxides (NO <sub>x</sub> ) RACT rule are not applicable to this source as it is located in Wayne County, which is not one of the counties listed in OAC rule 3745-110-02(A)(1).
g.	40 CFR Part 63, Subpart DDDDD (40 CFR 63.7480 – 63.7575) [In accordance with 40 CFR 63.7500(c) this emissions unit is a limited-use boiler subject to the tune-up requirements specified in this section.]	See b)(2)a through b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	40 CFR 63.1 – 63.16  (40 CFR 63.7565)	Table 10 to Subpart DDDDD of 40 CFR Part 63 – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 – 63.16 apply.

(2) Additional Terms and Conditions

- a. On May 19, 2015, the Orrville Department of Public Utilities received a one-year compliance extension for 40 CFR Part 63, Subpart DDDDD. The compliance date is now January 31, 2017. These Subpart DDDDD terms shall not be applicable earlier than the compliance date.

At all times, the permittee must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. This general requirement does not require Orrville to make any further efforts to reduce emissions if the applicable standards have been achieved.

- b. Emissions units B005 and B006 shall comply with the requirements for a “limited-use boiler” as defined in 40 CFR 63.7575, beginning January 31, 2017, as follows:
- i. These emissions units are identified as limited-use boilers and are not subject to the emission limits in Table 2 of the subpart, the operating limits in Table 4 of the subpart, or the energy assessment requirements in Table 3 of the subpart.
  - ii. These limited-use boilers are subject to 5-year tune-up requirements, conducted in accordance with 40 CFR 63.7540(a)(10)(i) through (vi) and Table 3 to the subpart.
- c. An initial tune-up must be completed for existing units no later than January 31, 2017, unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable 5-year schedule as specified in 40 CFR 63.7500(a)-(c), 40 CFR 63.7540(a)(10) through (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent tune-up must occur no more than 61 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler.

Each tune-up conducted to demonstrate compliance with the requirements of 40 CFR Part 63, Subpart DDDDD shall include the following elements as applicable:

- i. inspection of the burner(s) (and requirement to clean or replace any necessary components);
- ii. inspection of the flame pattern and requirement to adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications if applicable;
- iii. inspect the air-to-fuel ratio control system to ensure it is correctly calibrated and functioning properly;
- iv. optimize total emissions of CO, in correlation with any applicable NO<sub>x</sub> standards, consistent with the manufacturer's specification if applicable;
- v. measure the concentration of CO (in ppm, by volume) and oxygen (in volume percent) in the effluent gas stream, at the high-fire or typical operating load, and both before and after any adjustments (measurements can be made using a portable CO analyzer);
- vi. maintain records of the tune-up, inspection, and any corrective actions taken; and
- vii. where more than one type of fuel is used, records of the type and amount of each fuel type burned over the 12 months prior to the tune-up.

c) Operational Restrictions

- (1) Beginning on the compliance date January 31, 2017, the following maximum annual heat inputs shall apply to each emissions unit:

Emissions Unit	Maximum Annual Heat Input  (based upon a rolling 12-month summation of the monthly heat input values)
B005 - 110.9 MMBtu/hr Stoker Type, Coal-Fired Boiler No. 10	97,148.4
B006 – 170 MMBtu/hr Stoker Type, Coal-Fired Boiler No. 11	148,920

[Authority for term: OAC rule 3745-31-05(D)(1) and 40 CFR 63.7575]

- (2) The quality of the coal burned in these emissions units shall meet a sulfur content that is sufficient to comply with the allowable emission limitation in section b)(1).

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of heat input utilizing one of the following procedures:
  - a. Coal burn derived heat input:
    - i. the fuel usage of coal for each emissions unit, in pounds;
    - ii. the heat input rate for each emissions unit, in MMBtu (calculated by multiplying coal usage by the coal heating value); and
    - iii. the rolling, 12-month summation of the monthly heat input rate, in MMBtu.
- (2) The permittee shall maintain monthly records of the total quantity of coal received, and the results of the analyses for ash content, sulfur content, and heat content.

The permittee shall collect a representative sample of each shipment of coal which is received for burning. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and

ASTM Method D5865, Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval from the Ohio EPA, Northeast District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous

opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

[Authority for term: OAC rule 3745-77-07(C)(1) ]

- (4) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions, until the compliance date in 40 CFR Part 63, Subpart DDDDD, are the opacity of the visible particulate emissions from the electrostatic precipitator exhaust stack and the electrostatic precipitator power parameters (secondary amperage and secondary voltage) indicator ranges.

Stack opacity is measured and recorded by the certified continuous opacity monitoring (COM) system. The visible particulate emissions indicator range is each six-minute block average with an opacity value greater than 15%. When the opacity value is greater than 15%, corrective action (including, but not limited to, an evaluation of the emissions unit and electrostatic precipitator) will be required.

The electrostatic precipitator may be evaluated by checking the power parameters (secondary amperage and secondary voltage) for the ESP's three fields to ensure that they are operating within the indicator ranges below on an hourly average basis. The electrostatic precipitator power parameter indicator ranges for normal operation are:

For emissions unit B005:

Parameter and Range

Secondary Current 50 – 500 milli-amps

Secondary Voltage 11 - 55 kilovolts

For emissions unit B006:

Parameter and Range

Secondary Current 50 – 500 milli-amps

Secondary Voltage 11 - 55 kilovolts

When the opacity exceeds 15% for more than six consecutive minutes and the hourly average of one of the power parameters is outside of the indicator ranges above, additional corrective action focused on the ESP will be required. When opacity exceeds 15% for more than six consecutive minutes and the hourly averages for the power parameters are within the indicator ranges above, corrective action focused on the emission unit will be required.

Upon detecting an excursion of the visible particulate emission value above 15% opacity, the owner or operator shall restore operation of the emissions unit (including the control device) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely



recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements 40 CFR Part 64.

Pursuant to 40 CFR 64.2(b), CAM will not apply to sources subject to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date of that rule. The monitoring requirements specified in 40 CFR sections 63.7525 and 63.7535 will replace the monitoring requirements of 40 CFR Part 64.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

- (5) To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the ESP (a) during all periods of start-up until ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) during all periods of shutdown until the inlet temperature of the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic copy or hardcopy record of the temperature during periods of start-up and shutdown shall be maintained.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (6) The permittee shall maintain records of the following information for the boiler(s) in order to meet the record keeping requirement of 40 CFR 63.7525, 40 CFR 63.7555, 40 CFR 63.10(b) and to demonstrate compliance with Subpart DDDDD:
- a. A copy of each notification and report that is submitted to comply with Part 63 Subpart DDDDD, including all documentation supporting the Initial Notification and subsequent Notifications of Compliance Status and/or semiannual compliance reports, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
  - b. The operating hours and fuels and fuel usage records shall be maintained for each boiler that is operated as a limited-use boiler. A copy of the federally enforceable permit restricting the annual capacity factor to no more than 10% shall also be retained.

These records shall be retained in a form suitable and readily available for expeditious review for at least 5 years following the date of each occurrence, measurement,

maintenance, corrective action, report, or record. Records must be accessible from on-site for at least two years after the date of the record and may be located off-site for the remaining three years.

[Authority for term: 40 CFR 63.7540(a), 40 CFR 63.7555 and 40 CFR 63.7560]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all exceedances of the rolling, 12-month heat input limitation for each emissions unit.

The quarterly deviation (excursion) 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)]

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

- a. The permittee shall submit quarterly reports following the end of each calendar quarter to Ohio EPA's Northeast District Office documenting all instances of opacity values in excess of any limitation specified in this permit, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance.

- b. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include the following:

- i. the facility name and address;
- ii. the manufacturer and model number of the continuous opacity monitor;
- iii. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
- iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
- v. the total operating time (hours) of the emissions unit;
- vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;

- vii. the date, time, and duration of any/each malfunction of the continuous opacity monitoring system, emissions unit, and/or control equipment;
- viii. the date, time, and duration of any downtime\*\* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
- ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* where no exceedance of the opacity limit has occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the quarterly EER report

\*\* each downtime event shall be reported regardless of whether there is an exceedance of the opacity limit

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) Quarterly reports shall be submitted concerning the quality and quantity of coal received for burning in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
  - a. the total quantity of coal received (tons);
  - b. the average ash content (percent) of the coal received;
  - c. the average sulfur content (percent) of the coal received;
  - d. the average heat content (Btu/pound) of the coal received; and
  - e. the average SO<sub>2</sub> emissions rate (pounds SO<sub>2</sub>/MMBtu actual heat input) from the coal received.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the data obtained during the previous calendar quarters.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit, to the Ohio EPA, Northeast District Office, the following notifications in accordance with the applicable requirements of 40 CFR 63.7545 and 40 CFR 63.9(b)
  - a. The Initial Notification of Compliance shall be submitted according to 40 CFR 63.9(h)(2)(ii) and the notification must be submitted before the close of business on the 60<sup>th</sup> day following the completion of all initial compliance demonstrations according to 40 CFR 63.10(d)(2). The initial Notification of Compliance Status report must contain the following information:

- i. A description of the facility boilers including
  - (a) Identification of the subcategory each boiler is in;
  - (b) The design heat input capacity of the/each unit;
  - (c) A description of the add-on controls used on each boiler to comply with Subpart DDDDD;
  - (d) Description of the fuel(s) burned;
  - (e) Identification of fuel(s) that were determined to be non-waste or fuel(s) processed from discarded non-hazardous secondary materials under 40 CFR 241.3; and
  - (f) The justification for the selection of fuel(s) burned during the compliance demonstration;
- ii. A signed certification that all applicable emission limits and work practice standards have been met;
- iii. A description of any deviation(s) from an emission limit, work practice standard, or operating limit, the duration of the deviation, and the corrective action taken;
- iv. The following certification(s) of compliance, as applicable must be signed by a responsible official:
  - (a) Certification that the facility has complied with the required initial tune-up in accordance with 40 CFR 63.7540(a)(10)(i) through (vi); and
  - (b) Except for boilers burning natural gas, refinery gas, or other gas 1 fuel, certification that no secondary materials that are solid waste were combusted in any affected unit.
- b. If there are any plans to commence or recommence combustion of solid waste, notification must be made at least 30 days prior to the date combustion of solid waste will commence or recommence. The notification must identify:
  - i. the name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that will commence burning solid waste, and the date of the notice;
  - ii. the currently applicable subcategories under this subpart;
  - iii. the date on which you became subject to the currently applicable emission limits; and
  - iv. the date upon which you will commence combusting solid waste.

- c. If there has been a fuel switch or physical change to a boiler, and this fuel switch or change to the boiler has resulted in the applicability of a different subcategory (i.e., not limited-use), notification of the switch must be made within 30 days of the switch or change. This notification must identify:
  - i. the name of owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that have switched fuels or were physically changed;
  - ii. the currently applicable subcategory of the boiler(s);
  - iii. the date on which the fuel switch or physical change occurred; and
  - iv. the date of the notice.
- (5) The permittee shall submit each applicable report in Table 9 to 40 CFR Part 63, Subpart DDDDD by the dates in Table 9. For boilers that are subject only to a requirement to conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12), and not subject to emission limits or operating limits, only a 5-year compliance report is required.

The first compliance report must cover the period beginning on January 31, 2017, and ending on December 31, 2021. Unless otherwise approved, the first 5-year compliance report must be postmarked or delivered no later than January 31, 2022. Each subsequent compliance report must be submitted in accordance with the same applicable schedule and cover the applicable 5-year period from January 1 to December 31st of each 5-year period.

[Authority for term: 40 CFR 63.7550(a),(b)]

- (6) The compliance reports for 40 CFR Part 63, Subpart DDDDD must contain the following information as applicable for each boiler, as provided in 40 CFR 63.7550(c)(1) – (c)(4):
  - a. a company and facility name and address;
  - b. process unit information, emissions limitations, and operating parameter limitations;
  - c. the date of report and beginning and ending dates of the reporting period;
  - d. the total operating time during the reporting period;
  - e. the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(12); and include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period, as applicable, and was delayed until the next scheduled or unscheduled shutdown; and
  - f. a statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

[Authority for term: 40 CFR 63.7550(a) through (d), 40 CFR Subpart DDDDD Table 9]

f) Testing Requirements

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

a. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

Ongoing compliance with the opacity limitation contained in this permit shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit.

If required, compliance with the visible PE limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-17-07(A)]

b. Emission Limitation:

PE (filterable) shall not exceed 0.065 lb/MMBtu of actual heat input, on a 3-hour average emission rate basis.

Applicable Compliance Method:

Compliance with the emission limitation shall be demonstrated through the particulate emission testing required in f)(2).

[Authority for term: 3745-17-10(C)]

c. Emission Limitations:

SO<sub>2</sub> emissions shall not exceed 7.0 lbs/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance may be demonstrated based upon using the fuel analysis records required pursuant to section d)(2) and the applicable equation in OAC rule 3745-18-04(F).

If required, compliance with the SO<sub>2</sub> emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 and the procedures in OAC rule 3745-18-04(D).

[Authority for term: OAC rule 3745-18-91(E)]

- (2) As long as emissions units B005 and B006 is designated as a limited-use boiler per 40 CFR Part 63, Subpart DDDDD, the permittee shall conduct, or have conducted, particulate emission testing to demonstrate compliance with the allowable particulate emission rate in section b)(1)a in accordance with the following requirements:
- a. The testing of emissions units B005 and B006 as a limited-use boiler shall be conducted on 5-year intervals with the next required test to be performed no later than September 30, 2020.
  - b. Compliance with the allowable mass emission rate for particulate emissions shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03(B)(9).
  - c. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity.
  - d. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).
  - e. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
  - f. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

[Authority for term: OAC rule 3745-17-03(B)(9)]

g) **Miscellaneous Requirements**

- (1) None.