



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

10/14/2016

Certified Mail

Mr. Anthony Catanese
 Avon Lake Power Plant
 121 Champion Way, Suite 300
 Canonsburg, PA 15317

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL

Facility ID: 0247030013
 Permit Number: P0121748
 Permit Type: Administrative Modification
 County: Lorain

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

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Chronicle Telegram. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
 Permit Review/Development Section
 Ohio EPA, DAPC
 50 West Town Street, Suite 700
 P.O. Box 1049
 Columbus, Ohio 43216-1049

and Ohio EPA DAPC, Northeast District Office
 2110 East Aurora Road
 Twinsburg, OH 44087

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)963-1200.

Sincerely,

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

Cc: U.S. EPA Region 5 -Via E-Mail Notification
 Ohio EPA-NEDO; Canada

Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

PTI Admin Mod (for purposes of demonstrating attainment to Satisfy the 2010, 1-hour SO₂ NAAQS per the Data Requirements Rule)

2. Source Description:

NRG Energy owns and operates the Avon Lake Power Plant which was previously owned and operated by CEI (First Energy) from the 1930's until the year 2000. Orion Power Midwest purchased the facility in 2000 and in 2004 Orion merged with Reliant Energy of Texas. In 2011, Gen-On merged with Reliant Energy and in 2013 NRG merged with Gen-On.

The facility utilizes the following permitted units:

EU ID	EU Description
B010	1131 MMBtu/hr Pulverized coal-fired boiler for electric generation (110 MW)
B012	6040 MMBtu/hr Pulverized coal-fired boiler for electric generation (640 MW)
B013	468.9 MMBtu/hr Oil-fired combustion gas turbine for electric generation (25 MW)
B015	219.5 MMBtu/hr Natural gas/fuel oil-fired package boiler (for start-up and plant heat)
B016	219.5 MMBtu/hr Natural gas/fuel oil-fired package boiler (for start-up and plant heat)
F001	Paved and unpaved roads and parking areas on plant property.
F002	Coal storage pile
P901	Coal material handling equipment

3. Facility Emissions and Attainment Status:

The Avon Lake Plant is located in Lorain County which is designated nonattainment for Ozone and PM_{2.5} and is a major source for NO_x, PM₁₀, PM_{2.5}, SO₂, CO, VOC, and HAPs and therefore subject to Major Source provisions of 40 CFR Part 63, Subpart DDDDD. B010 and B012 are subject to 40 CFR Part 63, Subpart DDDDD (Boiler MACT) and 40 CFR Part 63, Subpart UUUUU (the Utility MATS/MACT Rule). On September 5, 2013, the Ohio EPA issued a one-year MATS compliance extension which expires on April 16, 2016.

The facility has requested a PTI Admin Mod. to revise the SO₂ emissions limitations to comply with the 1-hr. NAAQS standard per the Data Requirements Rule (DRR). The SO₂ limit revisions are for B010 and B012 as well as a SO₂ facility-wide limit for all emissions units emitting SO₂.

This permit supersedes PTIOP0120245 issued on April 19, 2016 to identify emissions unit B010 as a coal-fired “limited use” boiler when operating as an auxiliary boiler. Per 40 CFR Part 63, Subpart UUUUU, §63.9981 you are subject to the subpart if you own or operate a coal-fired EGU or an oil-fired EGU as defined in §63.10042 of this subpart. Subpart UUUUU §63.10042 defines an electric utility steam generating unit (EGU) as a fossil fuel-fired combustion unit of more than 25 megawatts electric (MWe) that serves a generator that produces electricity for sale. When emissions unit B010 operates as a coal-fired limited use aux boiler, emissions unit B010 will not produce electricity for sale and therefore not subject to Subpart UUUUU.

4. Source Emissions:

SO₂ Permit Emissions Limitations	B010 (Boiler #10, Unit #7)	B012 (Boiler #12, Unit #9)	Total SO₂ from all SO₂ emitting Sources
Current SO ₂ Emissions Limitation	4.65 lb/MMBtu, rolling, 30-day average	4.65 lb/MMBtu, rolling, 30-day average	n/a
Proposed SO ₂ Emissions Limitations	1.59 lb/MMBtu, Rolling, 30-day average		9,600 lb/hr, 1-hour average

5. Conclusion:

The permit terms and conditions contained in this federally enforceable permit are adequate to ensure compliance with the 1-hr. NAAQS standard per the Data Requirements Rule (DRR).

PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email: HClerk@epa.ohio.gov

Draft Air Pollution Permit-to-Install Administrative Modification
Avon Lake Power Plant
33570 Lake Road,,Avon Lake, OH 44012-0000
ID#:P0121748
Date of Action: 10/14/2016

A public hearing on the draft air permit is scheduled for Tuesday, 11/18/16 at 1:00PM at the Avon Lake Public Library, 32649 Electric Blvd., Avon Lake, OH 44012. All interested persons are entitled to attend or be represented and give written or oral comments on the draft permit at the hearing. Written comments on the draft permit must be received by 11/18/16. Comments received after this date will not be considered to be a part of the official record. Written comments may be sent to Corey Kurjian at corey.kurjian@epa.ohio.gov or Ohio EPA DAPC, NEDO, 2110 East Aurora Rd, Twinsburg, OH 44087.

On 8/21/15 the United States Environmental Protection Agency (U.S. EPA) promulgated the Data Requirements Rule for the 2010 1-Hour Sulfur Dioxide (SO₂) Primary National Ambient Air Quality Standard (NAAQS); Final Rule (80 FR 51052). The Ohio Environmental Protection Agency (Ohio EPA) submitted to U.S. EPA on 1/15/16, a list of sources subject to this rule, including Avon Lake Power Plant. This list was approved by U.S. EPA on 3/18/16. Pursuant to U.S. EPA regulations (40 CFR 51.1204), air agencies may submit to U.S. EPA federally enforceable permit restrictions to reduce SO₂ emissions that provide for attainment of the 2010 1-hour SO₂ NAAQS. Per these regulations, the federally enforceable permit limits must be effective no later than 1/13/17. This Administrative permit modification establishes federally-enforceable SO₂ emission limitations for emissions units B010, B012, B013, B015, and B016 to satisfy 1-hour SO₂ NAAQS.

The permit and complete instructions for requesting information may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the ID # or by contacting Corey Kurjian at Ph: (330)963-1200, corey.kurjian@epa.ohio.gov, or Ohio EPA DAPC - NEDO, 2110 East Aurora Rd, Twinsburg, OH 44087.



DRAFT

**Division of Air Pollution Control
Permit-to-Install
for
Avon Lake Power Plant**

Facility ID:	0247030013
Permit Number:	P0121748
Permit Type:	Administrative Modification
Issued:	10/14/2016
Effective:	To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install
for
Avon Lake Power Plant

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Draft Permit-to-Install
Avon Lake Power Plant
Permit Number: P0121748
Facility ID: 0247030013

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0247030013
Facility Description: Electric Utility Generating Station
Application Number(s): A0056999
Permit Number: P0121748
Permit Description: Administrative modification to establish federally-enforceable SO₂ emission limitations for emissions units B010, B012, B013, B015, and B016 to satisfy the 1-hour SO₂ NAAQS per the federal Data Requirements Rule.
Permit Type: Administrative Modification
Permit Fee: \$7,500.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 10/14/2016
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Avon Lake Power Plant
33570 Lake Road
Avon Lake, OH 44012-0000

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



Draft Permit-to-Install
Avon Lake Power Plant
Permit Number: P0121748
Facility ID: 0247030013

Effective Date: To be entered upon final issuance

Authorization (continued)

Permit Number: P0121748

Permit Description: Administrative modification to establish federally-enforceable SO₂ emission limitations for emissions units B010, B012, B013, B015, and B016 to satisfy the 1-hour SO₂ NAAQS per the federal Data Requirements Rule.

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

Emissions Unit ID:	B010
Company Equipment ID:	Boiler #10
Superseded Permit Number:	P0120245
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	B012
Company Equipment ID:	Boiler #12
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Draft Permit-to-Install
Avon Lake Power Plant
Permit Number: P0121748
Facility ID: 0247030013
Effective Date: To be entered upon final issuance

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 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.



Draft Permit-to-Install
Avon Lake Power Plant
Permit Number: P0121748
Facility ID: 0247030013
Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. The permittee shall ensure that any emissions unit(s) subject to the Cross State Air Pollution Rule (CSAPR) complies/comply with the requirements of the Ohio Administrative Code (OAC) Chapter 3745-109, which includes submitting timely permit applications.
3. Acid Rain Permits and Compliance – OAC chapter 3745-103

 The permittee shall ensure that any affected unit complies with the requirements of OAC Chapter 3745-103, which includes submitting timely permit applications. Emissions exceeding any allowances that are lawfully held pursuant to this rule are prohibited. The requirements of this rule will be specified in the Title V permit issued to this facility.
4. All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR Part 61, Subpart M.
5. The facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
6. When operating emissions unit B010 (boiler #10) as an auxiliary boiler, the permittee shall comply with the applicable provisions of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, as promulgated by the United States Environmental Protection Agency under 40 CFR Part 63, Subpart DDDDD. The final rules found in 40 CFR Part 63, Subpart DDDDD establish national emission standards for hazardous air pollutants (NESHAP), operational limits, work practice standards, and compliance requirements for industrial, commercial, and institutional boilers located at a major source of hazardous air pollutants (HAP).
7. Applicable Emissions Limitations and/or Control Requirements shall be effective beginning January 13, 2017:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D) (for purposes of establishing federally-enforceable SO ₂ emission limitations to satisfy the 1-hour SO ₂ NAAQS per the Data Requirement Rule)	Sulfur dioxide (SO ₂) emissions from all SO ₂ -emitting sources at the facility (i.e., emissions units B010, B012, B013, B015, and B016, combined) shall not exceed 9,600 lbs/hr ^a (1-hour average basis). SO ₂ emissions from emissions units B010 and B012, combined, shall not exceed 1.59 lb/mmBtu ^b (as a rolling, 30-day average).

^aClock-hour basis

^bFor each rolling, 30-boiler operating day period, the heat input-weighted SO₂ emission rate from emissions units B010 and B012, combined = mass SO₂ emitted from emissions units B010 and B012, combined (in pounds) divided by the total heat input to emissions units B010 and B012, combined (mmBtu). A boiler operating day is one in which either emissions unit B010 or B012, or both, operates for at least part of a calendar day.

8. Monitoring and/or Recordkeeping Requirements

a) For emissions unit B013, the permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

(1) Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

(2) Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate [in lbs/MMBtu and in lbs/hr (hourly average)]. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

b) For emissions units B015 and B016, for each shipment of 'very low sulfur oil' received for burning in these emissions units, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the

calculated sulfur dioxide emission rate [in lbs/MMBtu and in lbs/hr (hourly average)]. The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

- c) The permittee shall maintain daily records of the following information for emissions units B010 and B012, combined:
 - (1) The daily SO₂ emissions (in pounds/day) [calculated based on the record keeping requirements in d)(5) for emissions unit B010 and d)(4) for emissions unit B012];
 - (2) The daily heat input rate (in mmBtu/day) [calculated based on the record keeping requirements in d)(5) and d)(6) for emissions units B010 and d)(4) and d)(5) for emissions unit B012];
 - (3) The rolling, 30-day SO₂ emission rate (in pounds) [calculated from a) above];
 - (4) The rolling, 30-day heat input rate (in mmBtu) [calculated from b) above];
 - (5) The SO₂ emission rate, in lbs/mmBtu, as a rolling, 30-day average [calculated by dividing (3) by (4) above].
- d) The permittee shall maintain records for the hourly SO₂ emissions rate [lbs/hr (1-hour average basis)] for emissions unit B010 [calculated based on the record keeping requirements in d)(5) for emissions unit B010].
- e) The permittee shall maintain records for the hourly SO₂ emissions rate [lbs/hr (1-hour average basis)] for emissions unit B012 [calculated based on the record keeping requirements in d)(4) for emissions unit B012].
- f) The permittee shall maintain hourly records of the following information for emissions unit B013:
 - (1) The number of gallons of oil burned;
 - (2) The calculated hourly SO₂ emission rate [lbs/hr (1-hour average basis)] [calculated based on f)(1) above and the information contained in B.8.a)]
- g) The permittee shall maintain hourly records of the following information for emissions units B015 and B016, combined:
 - (1) The number of gallons of oil burned; and

(2) The calculated hourly SO₂ emission rate [lbs/hr (1-hour average basis)] [calculated based on g)(1)) above and the information contained in B.8.b)].

h) The permittee shall calculate and maintain hourly SO₂ emission rates [lbs/hr (1-hour average basis)] for emissions units B010, B012, B013, B015, and B016, combined [calculated by summing the hourly SO₂ emission rates from d), e), f)(2), and g)(2) above].

9. Reporting Requirements

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

(1) all exceedances of the SO₂ emission limitation [from all SO₂-emitting sources at the facility (i.e., emissions units B010, B012, B013, B015, and B016, combined)] of 9,600 lbs/hr; and

(2) all exceedances of the SO₂ emission limitation [from emissions units B010 and B012, combined] of 1.59 lb/mmBtu.

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

10. Testing Requirements

a) 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:

(1) Emission Limitation(s):

SO₂ emissions from all SO₂-emitting sources (i.e., emissions units B010, B012, B013, B015, B016, combined) shall not exceed 9,600 lbs/hr (on a 1-hour average basis).

SO₂ emissions from emissions units B010 and B012, combined, shall not exceed 1.59 lb/mmBtu (as a rolling, 30-day average).

Applicable Compliance Method:

Compliance with the lbs SO₂/hr emission limitation shall be demonstrated in accordance with the Monitoring and Recordkeeping requirements in B.8.h) above.

Compliance with the lb SO₂/mmBtu emission limitation shall be demonstrated in accordance with the Monitoring and Recordkeeping requirements in B.8.c) above.

If required, compliance with the SO₂ emission limitations above shall be demonstrated in accordance with Methods 1-4 and 6c of 40 CFR Part 60, Appendix A.



Draft Permit-to-Install
Avon Lake Power Plant
Permit Number: P0121748
Facility ID: 0247030013
Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions

1. B010, Boiler #10

Operations, Property and/or Equipment Description:

Coal-fired boiler for electric generation - 1131 mmBtu/hr

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) (Capacity factor restriction to qualify as a coal-fired "limited use boiler" per 40 CFR Part 63, Subpart DDDDD)	See c)(1) and c)(2).
b	OAC rule 3745-31-05(D) (for purposes of establishing federally-enforceable SO ₂ emission limitations to satisfy the 1-hour SO ₂ NAAQS per the Data Requirement Rule)	Sulfur dioxide (SO ₂) emissions from all SO ₂ -emitting sources at the facility (i.e., emissions units B010, B012, B013, B015, and B016, combined) shall not exceed 9,600 lbs/hr ^a (1-hour average basis). SO ₂ emissions from emissions units B010 and B012, combined, shall not exceed 1.59 lb/mmBtu ^b (as a rolling, 30-day average). See d)(8), e)(6), and f)(2).
c.	OAC rule 3745-17-10(C)	Particulate emissions (PE) shall not exceed 0.1 lb/mmBtu of actual heat input.
d.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
e.	OAC rule 3745-18-53(B)(2)	The SO ₂ emissions limitation specified by this rule is less stringent than the SO ₂ emission limitation established in under OAC rule 3745-31-05(D) above.
f.	40 CFR Part 63, Subpart UUUUU - National Emission Standards for	See b)(2)f. & h.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units	
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.]	Tune-up requirements specified in Table 3 (40 CFR 63.7540). See b)(2)f. & g.
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.

^aClock-hour basis

^bFor each rolling, 30-boiler operating day period, the heat input-weighted SO₂ emission rate from emissions units B010 and B012, combined = mass SO₂ emitted from emissions units B010 and B012, combined (in pounds) divided by the total heat input to emissions units B010 and B012, combined (mmBtu). A boiler operating day is one in which either emissions unit B010 or B012, or both, operate for at least part of a calendar day.

(2) (2) Additional Terms and Conditions

- a. This emissions unit is not subject to the requirements of 40 CFR Part 60, Subpart D (Standards of Performance for Fossil Fuel Fired Generators) or 40 CFR Part 60, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units).
- b. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60, Appendix B, Performance Specification 1. The plan shall include, at a minimum, procedures for conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring accurate operation of the continuous opacity monitoring system on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous emissions monitoring system must be kept on site and available for inspection during regular office hours.

- c. The continuous opacity monitoring system consists of all the equipment used to acquire data and record opacity.
- d. The permittee shall maintain a written quality assurance/quality control plan for the continuous SO₂ monitoring system, designed to ensure continuous valid and representative readings of SO₂ emissions in units of the applicable standard(s). Except as allowed below, the plan shall follow the requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous emissions monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct relative accuracy test audits for the continuous SO₂ monitoring system in accordance with the frequencies required pursuant to 40 CFR Part 60 and 40 CFR Part 75; or may follow relative accuracy test audit frequency requirements for monitoring systems subject to 40 CFR 75, Appendix B, in lieu of frequencies required in 40 CFR Part 60. In either case, results shall be recorded and reported in units of the applicable standard(s) in accordance with 40 CFR Part 60.

The plan shall include the requirement to conduct linearity checks pursuant to 40 CFR Part 75.

- e. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.
- f. The following conditions apply to emissions unit B010 only when the emissions unit is operating as an industrial boiler subject to 40 CFR Part 63, subpart DDDDD. In addition, those conditions do not apply to the emissions unit during periods of operation as an Electric Generating Unit (EGU). Any electric utility steam generating unit that has the capability of combusting more than 25 MW of coal or oil but did not fire coal or oil for more than 10.0 percent of the average annual heat input during any 3 calendar years or for more than 15.0 percent of the annual heat input during any calendar year is not subject to 40 CFR Part 63, Subpart UUUUU.
 - 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: Each limited-use boiler identified above shall have a federally enforceable average annual capacity factor of no more than 10%.

- iii. The permittee shall comply with the tune-up requirements specified in 40 CFR Part 63.7540(a)(10)(i) through (vi).

- g. An initial tune-up must be completed for emissions unit B010 no later than the compliance date specified in 40 CFR 63.7495, except as specified in paragraph (j) of 40 CFR 63.7510 section. 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. Units that produce electricity for sale may delay the inspection until the first outage, but may not exceed 36 months from the previous inspection. The frequency of tune-ups shall be based on the frequency identified in Table 3 to the subpart.

Each tune-up conducted to demonstrate compliance with the requirements of 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_x 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.
-
- h. On September 5, 2013, the permittee received a Mercury and Air Toxics Standards (MATS) Extension which extends the compliance date of 40 CFR Part 63, Subpart UUUUU to April 16, 2016. Since being subject to 40 CFR Part 63, Subpart UUUUU excludes one from being subject to 40 CFR Part 63, Subpart DDDDD, the permittee shall comply with the requirements and limits of 40 CFR

Part 63, Subpart DDDDD for emissions unit B010 and shall be in compliance with this NESHAP no later than April 16, 2016, at the conclusion of the compliance extension for 40 CFR Part 63, Subpart UUUUU.

- i. The above applicable requirements in C.1.b)(1) and C.1.b)(2) are applicable when operating the emissions unit as an auxiliary boiler.

c) Operational Restrictions

- (1) When operating emissions unit B010 as an auxiliary boiler:

- a. The maximum annual heat input for this emissions unit shall not exceed 990,756 mmBtu, based upon a rolling, 12-month summation of the monthly heat input values. The permittee has sufficient records to demonstrate compliance with the annual heat input limitation upon permit issuance in order to qualify as a "limited-use boiler" per 40 CFR Part 63, Subpart DDDDD.
- b. The permittee shall perform all maintenance activities as specified per the manufacturer's recommendations. To the extent practicable, the permittee shall maintain and operate the boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

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 emissions unit B010, in pounds;
 - ii. the heat input rate for emissions unit B010, in mmBtu (calculated by multiplying d)(1)a by the coal heating value); and
 - iii. the rolling, 12-month summation of the monthly heat input rate, in mmBtu.
- b. CEMS heat input:
 - i. Heat input from a certified CEMS will be used for the 12-month summation of the monthly heat input rate.

- (2) 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's Northeast District Office) 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.

- (3) The permittee shall operate and maintain the continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

- a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;
 - b. results of daily zero/span calibration checks;
 - c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;
 - d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;
 - e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; as well as,
 - f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).
- (4) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous SO₂ monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and has been certified by U.S. EPA or recommended for certification by Ohio EPA to U.S. EPA under 40 CFR Part 75. The letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be made available to the Director (the appropriate Ohio EPA's Northeast District Office) upon request.
- (5) The permittee shall operate and maintain equipment to continuously monitor and record SO₂ emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and/or 40 CFR Part 75, where applicable.

The permittee shall maintain records of all data obtained by the continuous SO₂ monitoring system including, but not limited to:

- a. emissions of SO₂ in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;
- b. emissions of SO₂ in pounds per hour, pounds per day, and in units of the applicable standard(s) in the appropriate averaging period;

- c. results of quarterly cylinder gas audits or linearity checks;
- d. results of daily zero/span calibration checks;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous SO₂ monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO₂ monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO₂ monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

- (6) The permittee shall collect daily composite samples of the coal burned in this emissions unit. A sufficient number of individual samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit during each calendar day. The coal sampling shall be performed in accordance with ASTM method D2234, Standard Practice for Collection of a Gross Sample of Coal.

Each daily composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods to be used to determine the ash content, sulfur content, and heat content shall be the most recent version of: ASTM method D3174, Standard Test Method for Ash in the Analysis Sample of Coal and Coke from Coal; ASTM method D3177, Standard Test Methods for Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D5865 Standard Test Method for Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA's Northeast District Office.

- (7) The permittee shall maintain daily records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, and heat content.
- (8) See Facility Terms and Conditions –Section B.8.

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 B010 when operating the emissions unit as an auxiliary boiler.

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

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

- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA's Northeast District Office, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, 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 30, April 30, July 30, and October 30 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 and malfunction event shall be reported regardless of whether there is an exceedance of the opacity limit

- (3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO₂ monitoring system:
- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA's Northeast District Office, documenting all instances of SO₂ emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, 40 CFR Part 75, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
 - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous SO₂ and other associated monitors;
 - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS 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 SO₂ emissions for the calendar quarter (tons);
 - vi. the total operating time (hours) of the emissions unit;
 - vii. the total operating time of the continuous SO₂ monitoring system while the emissions unit was in operation;
 - viii. results and dates of quarterly cylinder gas audits or linearity checks;

- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO₂ monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction** of the continuous SO₂ monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime** of the continuous SO₂ monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter. Data substitution procedures from 40 CFR 75 are not to be used for showing compliance with the short term OAC 3745-31-05(A)(3) rule-based or NSPS-based limitation(s) in this permit.

* where no excess emissions have 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 EER quarterly report

** each downtime and malfunction event shall be reported regardless of whether there is an exceedance of any applicable limit

- (4) The permittee shall collect, record, and maintain measurements, data, records, and reports required per 40 CFR Part 75; and shall submit certification, recertification, notifications, applications, monitoring plans, petitions for alternative monitoring systems, electronic quarterly reports, and any other pertinent record and/or report to the Administrator (U.S. EPA), as required by this Part.
- (5) The permittee shall submit monthly reports on the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each day during the calendar quarter:
 - a. the total quantity of coal burned (tons);
 - b. the average ash content (percent) of the coal burned;
 - c. the average sulfur content (percent) of the coal burned;
 - d. the average heat content (Btu/pound) of the coal burned; and
 - e. the calculated, average potential (uncontrolled) sulfur dioxide emission rate (pounds sulfur dioxide/mmBtu actual heat input) for the coal burned.



Draft Permit-to-Install
Avon Lake Power Plant
Permit Number: P0121748
Facility ID: 0247030013

Effective Date: To be entered upon final issuance

These monthly reports shall be submitted no later than 45 days after the end of each calendar month

- (6) See Facility Terms and Conditions – Section B.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, 40 CFR Part 60, 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; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

If required, compliance with visible PE limitation above shall be demonstrated in accordance with Method 9 of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

PE shall not exceed 0.1 lb/mmBtu of actual heat input.

Applicable Compliance Method:

Compliance with the PE limitation above shall be demonstrated based on the results of stack testing as required in f)(2).

(2) See Facility Term and Conditions- Section B.10.

(3) As long as emissions unit B010 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)b above in accordance with the following requirements:

a. The testing of emissions unit B010 as a limited-use boiler shall be conducted on 5 year intervals with the next required test to be performed no later than February 28, 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).

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.

- e. 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.

g) **Miscellaneous Requirements**

- (1) None.

2. B012, Boiler #12

Operations, Property and/or Equipment Description:

Coal-fired boiler for electric generation - 6040 mmBtu/hr

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) (for purposes of establishing federally-enforceable SO ₂ emission limitations to satisfy the 1-hour SO ₂ NAAQS per the Data Requirement Rule)	Sulfur dioxide (SO ₂) emissions from all SO ₂ -emitting sources at the facility (i.e., emissions units B010, B012, B013, B015, and B016, combined) shall not exceed 9,600 lbs/hr ^a (1-hour average basis). SO ₂ emissions from emissions units B010 and B012, combined, shall not exceed 1.59 lb/mmBtu ^b (as a rolling, 30-day average). See d)(12), e)(10), and f)(2).
a.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
b.	OAC rule 3745-17-10(C)	PE shall not exceed 0.1 lb/mmBtu of actual heat input.
c.	OAC rule 3745-18-53(B)(2)	The SO ₂ emissions limitation specified by this rule is less stringent than the SO ₂ emissions limitation established under OAC rule 3745-31-05(D) above.
e	40 CFR Part 63.1-15 [40 CFR 63.10040]	Table 9 to 40 CFR Part 63, Subpart UUUUU – Applicability of General Provisions (Subpart A) to Subpart UUUUU shows which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	<p>40 CFR Part 63, Subpart UUUUU [40 CFR 63.9980-10042]</p> <p>National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-fired Electric Utility Steam Generating Units</p> <p>[In accordance with 40 CFR 63.9980 to 63.9982 and the definitions in 63.10042, this emissions unit is an existing coal-fired electric utility steam generating unit (EGU), constructed prior to 5/3/11.]</p>	<p>The permittee shall comply with the following emission limitations as specified in 40 CFR 63.9991 and Table 2:</p> <p>Mercury (Hg) 1.2E0 lb/TBtu or 1.3E-2 lb/GWh.</p> <p>Comply with either limit:</p> <p>Hydrogen chloride (HCl) 2.0E-3 lb/MMBtu or 2.0E-2 lb/MWh; <u>OR</u> Sulfur dioxide (SO₂) 2.0E-1 lb/MMBtu or 1.5E0 lb/MWh.</p> <p>Comply with one of the following limits:</p> <ol style="list-style-type: none"> 1) 0.03 lb/MMBtu PE or 0.30 lb/MWh PE; <u>OR</u> 2) 5.0E-5 lb/MMBtu or 5.0E-1 lb/GWh of Total non-Hg HAP metals; <u>OR</u> 3) each Individual HAP metal as follows: <p>Antimony (Sb) 8.0E-1 lb/TBtu or 8.0E-3 lb/GWh;</p> <p>Arsenic (As) 1.1E0 lb/TBtu or 2.0 E-2 lb/GWh;</p> <p>Beryllium (Be) 2.0E-1 lb/TBtu or 2.0E-3 lb/GWh;</p> <p>Cadmium (Cd) 3.0E-1 lb/TBtu or 3.0E-3 lb/GWh;</p> <p>Chromium (Cr) 2.8E0 lb/TBtu or 3.0E-2 lb/GWh;</p> <p>Cobalt (Co) 8.0E-1 lb/TBtu or 8.0E-3 lb/GWh;</p> <p>Lead (Pb) 1.2E0 lb/TBtu or 2.0E-2 lb/GWh;</p> <p>Manganese (Mn) 4.0E0 lb/TBtu or 5.0E-2 lb/GWh;</p> <p>Nickel (Ni) 3.5E0 lb/TBtu or 4.0E-2 lb/GWh; and</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Selenium (Se) 5.0E lb/TBtu or 6.0E-2 lb/GWh. See c)(1).

^aClock-hour basis

^bFor each rolling, 30-boiler operating day period, the heat input-weighted SO₂ emission rate from emissions units B010 and B012, combined = mass SO₂ emitted from emissions units B010 and B012, combined (in pounds) divided by the total heat input to emissions units B010 and B012, combined (mmBtu). A boiler operating day is one in which either emissions unit B010 or B012, or both, operate for at least part of a calendar day.

(2) Additional Terms and Conditions

- a. This emissions unit is not subject to the requirements of 40 CFR Part 60, Subpart D (Standards of Performance for Fossil Fuel Fired Generators) or 40 CFR Part 60, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units).
- b. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60, Appendix B, Performance Specification 1. The plan shall include, at a minimum, procedures for conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring accurate operation of the continuous opacity monitoring system on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous emissions monitoring system must be kept on site and available for inspection during regular office hours.
- c. The continuous opacity monitoring system consists of all the equipment used to acquire data and record opacity.
- d. The permittee shall maintain a written quality assurance/quality control plan for the continuous SO₂ monitoring system, designed to ensure continuous valid and representative readings of SO₂ emissions in units of the applicable standard(s). Except as allowed below, the plan shall follow the requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous emissions monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct relative accuracy test audits for the continuous SO₂ monitoring system in accordance with the frequencies required pursuant to 40 CFR Part 60 and 40 CFR Part 75; or may follow relative

accuracy test audit frequency requirements for monitoring systems subject to 40 CFR 75, Appendix B, in lieu of frequencies required in 40 CFR Part 60. In either case, results shall be recorded and reported in units of the applicable standard(s) in accordance with 40 CFR Part 60.

The plan shall include the requirement to conduct linearity checks pursuant to 40 CFR Part 75.

The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

c) Operational Restrictions

- (1) The permittee shall comply with the applicable operational restrictions required under 40 CFR Part 63, Subpart UUUUU, including the following sections:

63.9991, 63.10000(a), Tables 3 and 4	Work practice standards and operating limits
63.10000(b)	General duty to minimize emissions
63.10001	Malfunctions
63.10005(j) and Table 3	Startup and shutdown requirements
63.10021(e)	Periodic tune-up requirements

- (2) The emissions from the silos of the pollution control equipment (ACI and DSI systems) for this emissions unit shall be vented to the bin vent filters at all times while the emissions unit is in operation.

- a. the collection efficiency shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

- (3) The emissions unit and its associated air pollution control system(s) shall be maintained in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

d) Monitoring and/or Recordkeeping Requirements

- (1) 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's Northeast District Office) 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.

- (2) The permittee shall operate and maintain the continuous opacity monitoring system to continuously monitor and record the opacity of the particulate emissions from this emissions unit. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including, but not limited to:

- a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;
 - b. results of daily zero/span calibration checks;
 - c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;
 - d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;
 - e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; as well as,
 - f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).
- (3) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous SO₂ monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and has been certified by U.S. EPA or recommended for certification by Ohio EPA to U.S. EPA under 40 CFR Part 75. The letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be made available to the Director (the appropriate Ohio EPA's Northeast District Office) upon request.
- (4) The permittee shall operate and maintain equipment to continuously monitor and record SO₂ emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and/or 40 CFR Part 75, where applicable.

The permittee shall maintain records of all data obtained by the continuous SO₂ monitoring system including, but not limited to:

- a. emissions of SO₂ in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

- b. emissions of SO₂ in pounds per hour, pounds per day, and in units of the applicable standard(s) in the appropriate averaging period;
- c. results of quarterly cylinder gas audits or linearity checks;
- d. results of daily zero/span calibration checks;
- e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- f. hours of operation of the emissions unit, continuous SO₂ monitoring system, and control equipment;
- g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO₂ monitoring system;
- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO₂ monitoring system; as well as,
- i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

- (5) The permittee shall collect daily composite samples of the coal burned in this emissions unit. A sufficient number of individual samples shall be collected so that each composite sample is representative of the average quality of coal burned in this emissions unit during each calendar day. The coal sampling shall be performed in accordance with ASTM method D2234, Standard Practice for Collection of a Gross Sample of Coal.

Each daily composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods to be used to determine the ash content, sulfur content, and heat content shall be the most recent version of: ASTM method D3174, Standard Test Method for Ash in the Analysis Sample of Coal and Coke from Coal; ASTM method D3177, Standard Test Methods for Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D5865 Standard Test Method for Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA's Northeast District Office.

- (6) The permittee shall maintain daily records of the total quantity of coal burned, and the results of the analyses for ash content, sulfur content, and heat content.

- (7) The permittee shall comply with the applicable monitoring and recordkeeping requirements required under 40 CFR Part 63, Subpart UUUUU, including the following sections:

63.10000(d)	Site-specific monitoring plan requirements
63.10005(d)	Continuous monitoring system requirements
63.10005(j), 63.10021(h), and Table 3	Startup and shutdown monitoring and record keeping requirements
63.10010(a)-(j)	Monitoring, installation, operation and maintenance requirements
63.10020(a)-(d)	Continuous monitoring and data collection requirements
63.10021(a)-(c)	Continuous compliance demonstration requirements
63.10023	PM CPMS requirements
63.10032(a)-(i)	Required overall records to be maintained
63.10033(a)-(c)	Format and retention of records

- (8) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the bin vent filters for the ACI and DSI systems when the controlled emissions unit(s) is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the bin vent filters on daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications.

Whenever the monitored value for the pressure drop deviates from the limit or range specified by the manufacturer, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

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

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

- f. a description of the corrective action;

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

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

- (9) The bin vent filters shall be equipped with alarms indicating when the pressure drop is outside of the manufacturer's recommended differential pressure range, thus prompting a filter change and/or repair of the controls.
- (10) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emissions incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

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

- (11) Notwithstanding the frequency of the monitoring and record keeping requirements specified in section d)(13) and d)(15), the permittee may reduce the visual observations from daily readings to weekly readings if the following conditions are met:

- a. for 1 full quarter the facility's daily visual observations indicate no abnormal visible emissions; and
- b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section d)(15), on a weekly basis.

The permittee shall revert to daily readings if any abnormal visible emissions are observed. The daily readings shall continue for one full quarter. If abnormal visible emissions are observed during this time, the permittee shall continue daily readings until such time that no abnormal visible emissions have been observed for a period of three consecutive months.

(12) See Facility Term and Conditions- Section B.8.

e) Reporting Requirements

- (1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA's Northeast District Office, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, 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 30, April 30, July 30, and October 30 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 and malfunction event shall be reported regardless of whether there is an exceedance of the opacity limit

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO₂ monitoring system:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA's Northeast District Office, documenting all instances of SO₂ emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, 40 CFR Part 75, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
 - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous SO₂ and other associated monitors;
 - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS 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 SO₂ emissions for the calendar quarter (tons);
- vi. the total operating time (hours) of the emissions unit;
- vii. the total operating time of the continuous SO₂ monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits or linearity checks;
- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO₂ monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction** of the continuous SO₂ monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime** of the continuous SO₂ monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter. Data substitution procedures from 40 CFR 75 are not to be used for showing compliance with the short term OAC 3745-31-05(A)(3) rule-based or NSPS-based limitation(s) in this permit.

* where no excess emissions have 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 EER quarterly report

** each downtime and malfunction event shall be reported regardless of whether there is an exceedance of any applicable limit

- (3) The permittee shall collect, record, and maintain measurements, data, records, and reports required per 40 CFR Part 75; and shall submit certification, recertification, notifications, applications, monitoring plans, petitions for alternative monitoring systems, electronic quarterly reports, and any other pertinent record and/or report to the Administrator (U.S. EPA), as required by this Part.
- (4) The permittee shall submit monthly reports on the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each day during the calendar quarter:
 - a. the total quantity of coal burned (tons);

- b. the average ash content (percent) of the coal burned;
- c. the average sulfur content (percent) of the coal burned;
- d. the average heat content (Btu/pound) of the coal burned; and
- e. the calculated, average potential (uncontrolled) sulfur dioxide emission rate (pounds sulfur dioxide/mmBtu actual heat input) for the coal burned.

These monthly reports shall be submitted no later than 45 days after the end of each calendar month.

- (5) The permittee shall submit quarterly reports that document the following for each day in the calendar quarter:
 - a. the 30-boiler operating day average SO₂ emission rate.

These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the information required by 40 CFR Part 60.49Da including 60.51Da(b) and 60.51Da(c). The quarterly report may satisfy the semi-annual reporting requirements of 60.51Da(j) if all information required under 60.51Da is included.

- (6) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 63, Subpart UUUUU, including the following sections:

63.10030(a)	Overall notification reporting requirements
63.10030(b)	Initial notification reports
63.10030(d)	Notification of intent to test
63.10030(e)	Notification of compliance status
63.10031(a)-(b) and Table 8	Reporting requirements and due dates
63.10031(c)-(d) and (g)	Compliance report content
63.10031(e)	Title V monitoring report allowance
63.10031(f)	Reporting requirements for EPA's WebFIRE database
63.10031(g)	Malfunction reporting requirements

- (7) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the bin vent filters was outside of the appropriate range or limit specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the bin vent filters;

- c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
- d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

- (8) The permittee shall submit semiannual written reports that identify:
 - a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
 - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.
- (9) These reports shall be submitted to the Director Ohio EPA’s Northeast District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.
- (10) See Facility Term and Conditions- Section B.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 particulate emissions shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) may be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

If required, compliance shall be demonstrated through visible PE observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitations:

Mercury (Hg) 1.2E0 lb/TBtu or 1.3E-2 lb/GWh.

Comply with either limit:

Hydrogen chloride (HCl) 2.0E-3 lb/MMBtu or 2.0E-2 lb/MWh; OR Sulfur dioxide (SO₂) 2.0E-1 lb/MMBtu or 1.5E0 lb/MWh.

Comply with one of the following limits:

1) 0.03 lb/MMBtu PE or 0.30 lb/MWh PE; OR

2) 5.0E-5 lb/MMBtu or 5.0E-1 lb/GWh of Total non-Hg HAP metals; OR

3) each Individual HAP metal as follows:

Antimony (Sb) 8.0E-1 lb/TBtu or 8.0E-3 lb/GWh;

Arsenic (As) 1.1E0 lb/TBtu or 2.0 E-2 lb/GWh;

Beryllium (Be) 2.0E-1 lb/TBtu or 2.0E-3 lb/GWh;

Cadmium (Cd) 3.0E-1 lb/TBtu or 3.0E-3 lb/GWh;

Chromium (Cr) 2.8E0 lb/TBtu or 3.0E-2 lb/GWh;

Cobalt (Co) 8.0E-1 lb/TBtu or 8.0E-3 lb/GWh;

Lead (Pb) 1.2E0 lb/TBtu or 2.0E-2 lb/GWh;

Manganese (Mn) 4.0E0 lb/TBtu or 5.0E-2 lb/GWh;

Nickel (Ni) 3.5E0 lb/TBtu or 4.0E-2 lb/GWh; and

Selenium (Se) 5.0E lb/TBtu or 6.0E-2 lb/GWh.

Applicable Compliance Method:

Compliance with the applicable limit(s) shall be demonstrated in accordance with the requirements of 40 CFR Part 63, Subpart UUUUU, in f)(4) below.

c. Emission Limitation:

PE shall not exceed 0.1 lb/mmBtu of actual heat input.

Applicable Compliance Method:



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If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

- (2) See Facility Term and Conditions- Section B.10.
- (3) The permittee shall comply with the applicable performance testing and compliance requirements required under 40 CFR Part 63, Subpart UUUUU, including the following sections:

63.10000(c)	Initial performance testing
63.10000(c)(1)(i) and (iii), and 63.10005(h)	Low emitting EGU (LEE) qualifications and performance testing requirements
63.10000(c)(1)(vi) and Appendix A	Initial compliance requirements for Hg – sorbent trap monitoring system (non-LEE)
63.10005(a)-(d) and 63.10011	Initial compliance requirements
63.10005(e) and (f) and 63.10011	Initial compliance requirements for work practice standards
63.10006	Subsequent performance test requirements
63.10007(a)-(f) and Table 5	Performance test requirements and test methods
63.10021(a) and (d)	Continuous compliance demonstration requirements

g) Miscellaneous Requirements

- (1) None.