Ohio Environmental Protection Agency

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

2/26/2016

Genevieve Damico *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: City of Akron Steam Generating
Facility ID: 1677010757
Permit Type: Minor Permit Modification
Permit Number: P0120083

Dear Ms. Damico:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. 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. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-2835 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

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

Cc: Akron Regional Air Quality Management District

PROPOSED

Division of Air Pollution Control
Title V Permit
for
City of Akron Steam Generating

Facility ID:	1677010757
Permit Number:	P0120083
Permit Type:	Minor Permit Modification
Issued:	2/26/2016
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
City of Akron Steam Generating

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Authorization

Facility ID:	1677010757
Facility Description:	Steam and Air Conditioning Supply.
Application Number(s):	A0054961
Permit Number:	P0120083
Permit Description:	Title V Minor Permit Modification for a steam and air conditioning supply facility to remove emissions units B001 & B002 (coal-fired boilers) and add insignificant units to the Title V permit list.
Permit Type:	Minor Permit Modification
Issue Date:	2/26/2016
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance

Superseded Permit Number: P0115769

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

City of Akron Steam Generating
226 Opportunity Parkway
Akron, OH 44307-2232

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

Akron Regional Air Quality Management District
1867 West Market St.
Akron, OH 44313
(330)375-2480

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Akron Regional Air Quality Management District. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

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. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. 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 (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), 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.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

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 all calibration and maintenance records and all original strip-chart recordingsfor continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submittedscheduled maintenancerequests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the

probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Akron Regional Air Quality Management District. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Akron Regional Air Quality Management District by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of

federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Akron Regional Air Quality Management District unless otherwise specified.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall 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"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. 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.

(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

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.

(Authority for term: OAC rule 3745-77-07(A)(6))

7. 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 reissuance, or modification, or for denial of a permit renewal application.

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 permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. 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, reopening 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.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. 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.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that 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, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible

Officialthat, 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 paragraph (E) of OAC rule 3745-77-03.

(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 Akron Regional Air Quality Management District 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.

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Akron Regional Air Quality Management District) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittentconsistent with A.13.d.2.a above.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.

e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Akron Regional Air Quality Management District with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Akron Regional Air Quality Management District as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met.

This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(Authority for term: OAC rule 3745-77-07(I))

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

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

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

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

21. 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.

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

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible 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 Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, noemissions unit identified in this permit that has beencertified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11)))

24. Reporting Requirements Related to Monitoring and Record Keeping RequirementsUnder State Law Only

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to theAkron Regional Air Quality Management District.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Akron Regional Air Quality Management District. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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.)

25. Records Retention RequirementsUnder State Law Only

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.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. 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, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Akron Regional Air Quality Management District in accordance with paragraph (B) of 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 emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Akron Regional Air Quality Management District must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation 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 by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or

c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

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 ofan 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 Akron Regional Air Quality Management District, 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 required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

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.

   This 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.

   (Authority for terms: OAC rule 3745-25-04)

2. **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). The permittee shall comply with the requirements and limits of this NESHAP for the facility's new (commenced construction after 6/4/10) boilers by January 31, 2013, or upon startup, whichever is later; and the facility's existing boilers shall be in compliance with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016.**

   The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://www.ecfr.gov or by contacting the appropriate Ohio EPA District office or local air agency.

   (Authority for terms: 40 CFR 63.6(b)(2), 40 CFR 63.7485, 40 CFR 63.7490, and 40 CFR 63.7495)

3. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters: B003, B004, B005, B006 and B007.

   a) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 63 Subpart DDDDD, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial,	The emissions from the boiler(s) shall not exceed the following emission limitations, as identified in the most recent amendment to 40 CFR Part 63, Subpart DDDDD, and

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Commercial, and Institutional Boilers and Process Heaters. (applicability 40 CFR 63.7485; affected source, 40 CFR 63.7490)	as identified in: Table 2 for existing units: **For units designed to burn solid fuel (B003 & B004):** Hydrochloric acid (HCl) emissions shall not exceed 2.2E-02 pound per million Btu of heat input. Mercury (Hg) emissions shall not exceed 5.7E-06 pound per million Btu of heat input. **For units designed to burn liquid fuel (B005):** HCl emissions shall not exceed 1.1E-03 pound per million Btu of heat input. Hg emissions shall not exceed 2.0E-06 pound per million Btu of heat input. **For units designed to burn heavy liquid fuel (B005):** Filterable particulate matter (PM) shall not exceed 6.2E-02 pound per million Btu of heat input†. Carbon monoxide (CO) emissions shall not exceed 0.13 pound per million Btu of steam output, 3-run average. **For stoker units designed to burn wet bio-mass fuel (B003 & B004):** Filterable PM shall not exceed 3.7E-02 pound per million Btu of heat input†. CO emissions shall not exceed 1.4 pounds per million Btu of steam output, 3-run average.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Boilers subject to emission standards in Table 2 shall also meet the work practice standards identified in Table 3 during startup and shutdown of the unit and the tune-up requirements, as applicable, in Table 3. Boilers not subject to emission standards shall meet the tune-up requirements identified in Table 3 as applicable to the unit. The permittee shall demonstrate compliance with the limits published in the final amendments to Subpart DDDDD, as required by the subpart.
b.	40 CFR 63.7525(c); and 40 CFR Part 63, Subpart DDDDD; Table 4 #3 and #6; and Table 8 #1	Where not required to install PM CPMS, PM CEMS*, or where not using a bag leak detection system, COMS* must be used to demonstrate compliance with the opacity standard and visible emissions shall not exceed 10% opacity as a daily block average.
c.	40 CFR 63.1-15	Table 10 to SubpartDDDDD of 40 CFR Part 63 – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 – 15 apply.

† based on a 30-day rolling average if ≥ 250 MMBtu/hr and designed to burn coal/solid fossil fuel or heavy liquid fuel, and must install either PM CPMS in 40 CFR 63.7525(b)(4) or PM CEMS in (b)(8), per 40 CFR 63.7525.

* continuous monitoring system (CMS), continuous emissions monitoring system (CEMS), continuous opacity monitoring system (COMS), and continuous parameter monitoring system (CPMS).

2. Additional Terms and Conditions

Continuous monitoring system plan:

a. The permittee shall develop a site-specific continuous monitoring system (CMS) performance evaluation test plan and shall, upon request, submit a copy to the

appropriate District Office or local air agency of the Ohio EPA Division of Air Pollution Control (DAPC) for evaluation and/or approval. A performance evaluation of each CMS shall be conducted in accordance with the site-specific performance evaluation test plan. The continuous monitoring system (CMS) shall be operated and certified in accordance with the appropriate performance specification under Appendix B to Part 60 and shall meet the requirements of 40 CFR 63.7525. The test evaluation of the CMS(s) shall demonstrate the precision and accuracy of the equipment and completeness of the data collected. The site-specific performance evaluation test plan shall require all CMS (systems required by rule) be maintained in continuous operation during process operations. The site-specific monitoring plan shall address the following requirements:

i. the design, data collection, quality assurance, and quality control elements outlined in 40 CFR 63.8(d);

ii. installation of the CEMS sampling probe at a location that is representative of the exhaust emissions (e.g., on or downstream of the last control device);

iii. performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems;

iv. performance evaluation procedures and acceptance criteria (e.g., calibrations, accuracy audits, analytical drift);

v. ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c);

vi. ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and

vii. ongoing recordkeeping and reporting procedures in accordance with the requirements of 40 CFR 63.10(c) and (e).

The performance evaluation test plan shall also include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external quality assurance (QA) program.

viii. The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance.

ix. The external QA program shall include, at a minimum, provisions for systems audits and validation of instrument calibrations, data collection, sample logging, and documentation of quality control data and field maintenance activities and must also address the following requirements:

(a) each CMS (parameter monitor or sampling probe) shall be installed at a location that accurately measures the exhaust emissions representative of the emissions unit (e.g., on or downstream of the last control device) and accurately measures the process and/or the control device parameters;

(b) performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(c) performance evaluation procedures and acceptance criteria, including calibration frequency, results, and records.

The permittee shall notify both the Central Office and the appropriate District or local office of the Ohio EPA DAPC at least 60 days before the performance evaluation is scheduled for a CEMS or COMS, or by a mutually agreed upon (by DAPC Central Office) date. The permittee shall notify the appropriate District or local office of the Ohio EPA DAPC at least 60 days before the performance evaluation is scheduled for a CPMS. The DAPC may request a copy of the site-specific performance evaluation test plan and additional relevant information following the review of a site-specific performance evaluation test plan. All CMS shall be installed, operational, and the data verified, as specified in 40 CFR 63.7505(d), either prior to or in conjunction with conducting performance tests required under 40 CFR 63.7.

b. The permittee shall develop and, if requested, submit a site-specific test plan to the Director (appropriate Ohio EPA Division of Air Pollution Control, District Office or local air agency) for evaluation and approval, at least 60 calendar days before the performance test is scheduled to take place and simultaneously with the notification of intention to conduct a performance test, unless the Director agrees upon a different date. The site-specific test plan shall demonstrate the precision and accuracy of the equipment and completeness of the data collected. The test plan shall include, at a minimum, the following elements: a test program summary; the test schedule; data quality objectives; and both an internal and external quality assurance (QA) program.

The internal quality assurance (QA) program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision (e.g.: sampling and analysis of replicate samples). The external QA program shall include, at a minimum, the following elements:

i. provisions for a test method performance audit during the performance test, in order to provide a measure of test data bias;

ii. provisions for systems audits, instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities; and

iii. provisions to provide appropriate notice (60 days), to the Director, of the performance test, performance audit, and systems audit, allowing the

regulating agency the opportunity to arrange for their own on-site evaluation.

The performance audits shall consist of blind audit samples, provided by an accredited audit sample provider, which shall be taken and analyzed during each performance test. The Director may request additional relevant information following the receipt and review of the site-specific test plan.

Bag leak detection plan:

c. If not required to install CPMS (or CEMS) for PM in accordance with 40 CFR 63.7505(d)and choosing to use a bag leak detections system to demonstrate compliance, the permittee shall develop (and submit upon request) a site-specific monitoring plan for the bag leak detection system. The site-specific monitoring plan shall address the following requirements:

i. the location(s) where the bag leak detection sensor(s) are to be installed, i.e., in a position(s) that is representative of the relative or absolute PM loadings from each exhaust stack, roof vent, or compartment of the fabric filter;

ii. provisions for performance evaluations of the bag leak detection system, to be conducted in accordance with the site-specific monitoring plan and the guidance provided in U.S. EPA's document number "EPA-454/R-98-015";

iii. provisions requiring the bag leak detection system to be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter or less;

iv. provisions requiring the bag leak detection system to be equipped with a device to continuously record the output signal from the sensor;

v. provisions requiring the bag leak detection system to be equipped with a system that will alert plant operating personnel when an increase in relative PM emissions are detected over a preset level (alert set point);

vi. provisions requiring the system alert to be placed in a location where it can be easily heard or seen by plant operating personnel and it may be shared among detectors;

vii. identification of the corrective action(s) to be initiated within 1 hour of a system alert and provisions requiring repairs, replacements, and/or adjustments to be completed as soon as practical; and

viii. provisions requiring the fabric filter system to be operated and maintained so that the periods that would cause an alert are no more than 5% of the operating time during any 6-month period.

d. The permittee shall develop a site-specific fuel monitoring plan for each fuel burned in boilers that burn more than a single type of fuel; or for each fuel that the facility chooses to demonstrate compliance through fuel analyses. A fuel analyses is not require for fuels used only for startup and shutdown or for transient flame stability, natural gas, refinery gas, or fuels exempted in 40 CFR 63.7510(a)(2)(i) or (ii) or 40 CFR 63.7521(f)(1) through (4). For solid and liquid fuels, fuel analyses must be conducted for Cl and Hg, and TSM if opting to comply with the TSM alternative standard; and for gaseous fuels, other than natural gas, refinery gas, or exempted fuels, a fuel analysis must be conducted for Hg. Fuel analyses shall be conducted in accordance with the procedures identified in 40 CFR 63.7521 and Table 6 to Subpart DDDDD. A fuel gas system that consists of multiple gaseous fuels collected and mixed is considered a single fuel type; and sampling and analysis is only required for the gas mix that will feed the boiler. The site-specific fuel analysis plan shall include the following information:

i. the identification of all fuel types anticipated to be burned in each boiler;

ii. for each anticipated fuel type, a statement as to whether the fuel analyses will be conducted by the permittee or by the fuel supplier;

iii. for each anticipated fuel type, the specific procedures to be used for collecting and preparing the composite samples if the procedures are different from those described in 40 CFR 63.7521(c) and (d) and/or Table 6 to the subpart;

iv. for each anticipated fuel type, the analytical methods from Table 6 to the subpart that will be used for the measurement of chlorine (Cl), mercury (Hg), and/or total selected metals (TSM) and the minimum expected detection levels;

v. if requesting the use of an alternative analytical method other than those required by Table 6 from Subpart DDDDD to Part 63, a detailed description of the methods and procedures that are proposed to be used, along with the written approval of the Administrator (U.S. EPA Region V) and a copy of the site-specific monitoring plan that was approved; and

vi. for each anticipated fuel type, identification of the location where fuel samples will be collected, that most accurately represents the fuel type and prior to mixing with other dissimilar fuel types.

If using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 of the Subpart.

e. Any reference to the “Director” in this permit shall take the meaning of the applicable District Office or local air agency of the Division of Air Pollution Control (DAPC), unless otherwise specified in the terms. Unless other arrangements have been approved by the Director, notification of the initial certification and performance evaluations of a continuous monitoring system (CMS), scheduled

performance testing, and all required reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f. Except for existing units demonstrating compliance through emissions averaging (40 CFR 63.7522), each existing boiler subject to Part 63 Subpart DDDDD shall meet each applicable emission limit in Table 2; and all exiting boilers shall meet the work practice standards identified in Table 3 and each applicable operating limit for the control device(s) identified in Table 4, by the compliance date of 1/31/16.

g. An existing boiler located at a major source of HAP shall demonstrate initial compliance with the emission limits in Table 2 of Part 63 Subpart DDDDD no later than 7/29/16 or no later than 180 days after re-start of a boiler that was not operated following the compliance date (1/31/16) or that has not operated for over a year following the last compliance demonstration.

h. For each existing boiler a one-time energy assessment must be performed by a qualified energy assessor no later than 1/31/16. The one-time energy assessment for existing units must include the following:

i. a visual inspection of the boiler system;

ii. an evaluation of operating characteristics of the boiler systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints;

iii. an inventory of major energy use systems consuming energy from affected boilers, which are under the control of the boiler operator;

iv. a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;

v. a review of the facility's energy management practices and recommendations for improvements consistent with the definition of energy management practices, if identified;

vi. a list of cost-effective energy conservation measures that are within the permittee’s control;

vii. a list of the energy savings potential of the energy conservation measures identified; and

viii. a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping these investments.

i. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable annual, biennial, or 5-year schedule as specified in 40 CFR 63.7500(c), (d), and (e), 40 CFR 63.7540(a)(10) through (13), and Table 3 to the subpart. An initial tune-up must be completed for an existing boiler no later than

1/31/16; unless the boiler in not in operation at this time, where a tune-up must be completed within 30 days after the re-start of the boiler.

j. The emissions limits, work practice standards, and operating limits of the NESHAP apply at all times of boiler operation, except during periods of startup and shutdown during which the requirements of Table 3 #5 (startup) and #6 (shutdown) of Part 63, Subpart DDDDD apply. Compliance with the emissions limits is demonstrated through: performance stack testing; fuel analyses; and/or continuous monitoring using continuous monitoring systems (CMS), including continuous emission monitoring systems (CEMS), continuous opacity monitoring systems (COMS), continuous parameter monitoring systems (CPMS), and PM continuous parameter monitoring systems (PM CPMS).

k. Following the initial compliance demonstration, compliance with the emission standards for HCl and Hg, or TSM where opting to comply with the standard for TSM instead of PM, may be demonstrated using fuel analysis (instead of a performance test) if the emission rate, calculated in accordance with 40 CFR 63.7530(c), is less than the applicable limit identified in Table 2. Fuel analyses shall be conducted in accordance with 40 CFR 63.7521 and Table 6 to Subpart DDDDD of Part 63. For gaseous fuels, fuel analysis cannot be used for compliance with the HCl or TSM standards.

l. Continuous compliance with each emission limits in Table 2, work practice standards in Table 3, and operating limits in Table 4 of the subpart shall be demonstrated in accordance with the methods specified in 40 CFR 63.7540(a) and Table 8 to Subpart DDDDD of Part 63. Operating above the established maximum or below the established minimum operating limit(s) shall constitute a deviation of the operating limits identified in Table 4 of the subpart.

m. The permittee shall meet the applicable requirements of the General Provision in Part 63 Subpart A as identified in Table 10 to the subpart.

b) Operational Restrictions

1. For each boiler designed to burn coal/solid fossil fuels or heavy liquid fuels and has an average annual heat input greater than 250 MMBtu/hour from solid fossil fuels and/or heavy liquid fuels, and if demonstrating compliance with the PM standard (rather than the TSM standard) a PM CPMS or PM CEMS shall be installed, certified, operated, and maintained in accordance with the requirements of 40 CFR 63.7525(b), 40 CFR 63.7530(b), and 40 CFR 63.7540(a)(18) or (19), as applicable, and the site-specific monitoring plan.

(Authority for term: 40 CFR 63.7525(b), 40 CFR 63.7540(a)(9), and 40 CFR Part 63, Subpart DDDDD Table 8 #2)

2. For each boiler controlled by a baghouse equipped with a bag leak detection system, the bag leak detections system shall be installed, operated, and maintained in accordance with 40 CFR 63.7525(j); and the fabric filter system shall be operated and maintained so that the periods that would cause an alert are no more than 5% of the operating time during any 6-month period. Corrective action(s) must be initiated within 1 hour of a

system alert and repairs, replacements, and/or adjustments must be completed as soon as practical.

(Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(j), 40 CFR 63.7540(a)(7), and Subpart DDDDD Tables 4 #3b and 8 #3)

3. For each boiler controlled by a particulate wet scrubber, the permittee shall maintain the 30-day rolling average pressure drop and the 30-day rolling average liquid flow rate at or above the lowest one hour average pressure drop and liquid flow rate measured according to Table 7 of the subpart, during the most recent performance test demonstrating compliance with the PM emission limitation and in accordance with 40 CFR 63.7530(b)(4). The monitoring systems shall meet the requirements of 40 CFR 63.7525(d), (e), and (f).

   (Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d), (e), and (f), and 40 CFR Part 63, Subpart DDDDD Tables 4 #1, 7 #1a, and 8 #4)

4. For each boiler controlled by a wet acid gas (HCl) scrubber, the permittee shall maintain the 30-day rolling average effluent pH, the 30-day rolling average liquid flow rate, and the 30-day rolling average pressure drop at or above the lowest one hour average pH, liquid flow rate, and pressure drop measured according to Table 7 of the subpart, during the most recent performance test demonstrating compliance with the HCl emission limitation and in accordance with 40 CFR 63.7530(b)(4)(i). The monitoring systems shall meet the requirements of 40 CFR 63.7525(d), (e), (f), and (g).

   (Authority for term: 40 CFR 63.7530(b)(4)(i), 40 CFR 63.7525(d), (e), (f), and (g), and 40 CFR Part 63, Subpart DDDDD Tables 4 #2, 7 #2a, and 8 #4 & #5)

5. For each boiler controlled by an electrostatic precipitator (ESP) and wet scrubber (and not required to install/operate PM CPMS or COMS), the permittee shall maintain the 30-day rolling average total secondary electric power input (secondary voltage and secondary amperage) of the ESP at or above the lowest hourly average total secondary electric power measured according to Table 7 of the subpart, during the most recent performance test demonstrating compliance and in accordance with 40 CFR 63.7530(b)(4). The monitoring systems shall meet the requirements of 40 CFR 63.7525(d) and (h).

   (Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d) and (h), 40 CFR Part 63, Subpart DDDDD Tables 4 #4b 7 #1b, and 8 #7)

6. Each boiler equipped with a dry control system and not required or electing to install and operate a PM CPMS, PM CEMS, or a bag leak detection system, shall be installed with a COMS. COMS data must be reduced in accordance with 40 CFR 63.8(g)(2) and the stack opacity must be maintained at less than or equal to 10% as a daily block average. Each COMS shall be installed, certified, operated, and maintained in accordance with Performance Specification 1, in Part 60 Appendix B, 40 CFR 63.8, 40 CFR 63.7525(c), and the site-specific monitoring plan.

   (Authority for term: 40 CFR 63.7525(c), 40 CFR 63.8, 40 CFR Part 63, Subpart DDDDD Tables 4 #4a or #6 and 8 #1)

7. For each boiler controlled by a dry scrubber, the permittee shall maintain the 30-day rolling average sorbent injection rate at or above the sorbent injection rate at the load fraction multiplied by the lowest hourly average injection rate measured according to Table 7 of the subpart, during the most recent performance test demonstrating compliance and in accordance with 40 CFR 63.7530(b)(4). The monitoring systems shall meet the requirements of 40 CFR 63.7525(d) and (i).

   (Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d) and (i), and 40 CFR Part 63, Subpart DDDDD Tables 4 #5, 7 #2b, and 8 #6)

8. For each boiler controlled by a dry scrubber, the permittee shall maintain the 30-day rolling average activated carbon injection rate at or above the load fraction multiplied by the lowest hourly average injection rate measured according to Table 7 of the subpart, during the most recent performance test demonstrating compliance and in accordance with 40 CFR 63.7530(b)(4). The monitoring systems shall meet the requirements of 40 CFR 63.7525(d) and (i).

   (Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d) and (i)-sorbent, and 40 CFR Part 63, Subpart DDDDD Tables 4 #5, 7 #2b and 8 #6)

9. For each boiler controlled by either a wet scrubber or dry sorbent injection system, subject to an HCl emission limit, and electing to establish an operating limit based on using SO_2 CEMS, the permittee shall maintain the 30-day rolling average SO_2 emission rate at or below the highest hourly average SO_2 concentration measured during the most recent performance test demonstrating compliance with the HCl standard.

   (Authority for term: 40 CFR 63.7525(m), 40 CFR 63.7530(b)(4) and (i) and 40 CFR Part 63, Subpart DDDDD Tables 4 #10 and 8 #11)

10. For boilers subject to a CO emission limit and the permittee is using the option to install an oxygen analyzer, the system shall be installed, calibrated, and maintained in accordance with the manufacturer's recommendations. The permittee shall maintain the 30-day rolling average oxygen concentration of the stack gas at or above the lowest hourly average O_2 concentration measured during each performance test demonstrating compliance with the CO limit, as specified in Table 8. The minimum O_2 level shall be set no lower than the minimum value established during the three performance tests.

    (Authority for term: 40 CFR 63.7525(a), 40 CFR 63.7530(b)(4), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD Tables 4 #9, 7#4, and 8 #9)

11. For boilers subject to a CO emission limit and the permittee is using the option to install an oxygen trim system, the monitoring system shall maintain excess air at the desired level by providing a feedback signal to the combustion air controller. The oxygen concentration of the stack gas must be maintained at or above the lowest hourly average O_2 concentration measured during the most recent performance test demonstrating compliance with the CO limit. The minimum O_2 level shall be set no lower than the minimum value established during the three performance tests.

    (Authority for term: 40 CFR 63.7525(a), 40 CFR 63.7530(b)(4), and 40 CFR 63.7575)

12. Carbon monoxide CEMS and the O_2 analyzer shall be install, certified, operated, and maintained in accordance with Performance Specification 4, 4A, or 4B of Part 60 Appendix B, the site-specific monitoring plan, 40 CFR 63.7525(a), and 40 CFR 63.8. The 30-day or 10-day (as applicable) rolling average CO concentration shall be maintained at or below the applicable CO CEMS-based standard identified in 2 to Part 63 Subpart DDDDD.

    (Authority for term: 40 CFR 63.7525(a); 40 CFR 7540(a)(8), 40 CFR 63.7510(c); 40 CFR 63.8; and 40 CFR Part 63, Subpart DDDDD Table 8 #10)

13. For each boilers where compliance was/is demonstrated through a performance test, the permittee shall maintain the operating load such that is does not exceed 110% of the highest hourly average operating load recorded during the most recent performance test demonstrating compliance.

    (Authority for term: 40 CFR 63.7520(c), 40 CFR Part 63, Subpart DDDDD Table 4 #8 and Table 8 #10)

14. The permittee, demonstrating compliance through fuel analyses for HCl, Hg, or TSM, shall conduct monthly (or quarterly if meeting the requirements of 40 CFR 63.7515(e)) fuel analyses in accordance with 40 CFR 63.7521 and Table 6 to the subpart; and shall maintain the fuel type or fuel mixture such that the applicable emission rate(s), calculated according to 40 CFR 63.7530(c)(1), (2) and/or (3), are no more than or less than the applicable emission limits in Table 2 of the subpart. Following the first 12 months of compliance, the rolling 12-month average emissions of HCl, Hg, and/or TSM shall be maintained at or below the applicable emission limit(s).

    (Authority for term: 40 CFR 63.7505(c), 40 CFR 63.7510(b), 40 CFR 63.7515(e), 40 CFR 63.7530(c), 40 CFR 63.7540(a)(2) and (3), 40 CFR Part 63, Subpart DDDDD Tables 4 #7, Table 6, and 8 #8)

15. A tune-up and inspection of the limited-use boiler(s) must be completed every 5 years as specified in 40 CFR 63.7540(a)(10) and Table 3 #1 of Subpart DDDDD. The limited-use boiler(s) is/are not subject to the emission standards found in Tables 1, 2, or 11 through 13, the annual tune-up requirement or energy assessment requirements in Table 3, or the operating limits in Table 4 to Part 63 Subpart DDDDD. The inspection includes measuring the concentration of CO in the effluent gas stream in ppmv and oxygen in volume percent, at high fire or typical operating load and both before and after the tune-up; and maintaining a record/report of the results of the inspection and the fuel(s) burned in the boiler(s) during the year if capable of burning more than one type of fuel. An initial tune-up must be completed no later than 1/31/16 for the existing limited-use boiler(s); or no later than 30 days following the startup of the unit following this date.

    (Authority for term: 40 CFR 63.7500(c), 40 CFR 63.7510(e) and (j), 40 CFR 63.7540(a)(10),(12), and (13) 40 CFR 63.7515(d), and 40 CFR Part 63, Subpart DDDDD Table 3 #1)

16. Boilers without a continuous oxygen trim system and with a heat input capacity greater than 10 MMBtu/hr must have a tune-up and inspection completed annually (no more than 13 months after the previous tune-up and inspection) as specified in 40 CFR 63. 7540(a)(10) and Table 3 #3 of Subpart DDDDD. The inspection includes measuring the concentration of CO in the effluent gas stream in ppmv and oxygen in volume percent, at

high fire or typical operating load and both before and after the tune-up; and maintaining a record/report of the results of the inspection and the fuel(s) burned in the boiler during the year if capable of burning more than one type of fuel. For an existing boiler, an initial tune-up must be completed no later than 1/31/16.

(Authority for term: 40 CFR 63.7540(a)(10) and (13), 40 CFR 63.7515(d), 40 CFR 63.7510(e), and 40 CFR Part 63, Subpart DDDDD Table 3 #3)

17. Boilers with a continuous oxygen trim system that maintains an optimum air to fuel ratio must have a tune-up and inspection completed every 5 years (no more than 61 months after the previous tune-up and inspection) as specified in 40 CFR 63. 7540(a)(10) and Table 3 #1 of Subpart DDDDD. The inspection includes measuring the concentration of CO in the effluent gas stream in ppmv and oxygen in volume percent, at high fire or typical operating load and both before and after the tune-up; and maintaining a record/report of the results of the inspection and the fuel(s) burned in the boiler during the year if capable of burning more than one type of fuel. For an existing boiler, an initial tune-up must be completed no later than 1/31/16.

    (Authority for term: 40 CFR 63.7540(a)(10) and (13), 40 CFR 63.7515(d), 40 CFR 63.7510(e), and 40 CFR Part 63, Subpart DDDDD Table 3 #1)

18. A boiler, subject to the emissions standards in Table 2 of Subpart DDDDD to Part 63, must be operated to meet the work practice standards of Table 3 #5 during startups and Table 3 #6 during shutdowns.

    (Authority for term: 40 CFR 63.7530(h) and 40 CRFR Part 63, Subpart DDDDD Table 3 #5 & #6)

19. The boiler and associated air pollution control and monitoring equipment must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.

    (Authority for term: 40 CFR 63.7500(a)(3))

20. All continuous monitoring system (CMS) shall be installed, operational, and the data verified, as specified in 40 CFR 63.8 and Subpart DDDDD, either prior to or in conjunction with conducting performance tests under 40 CFR 63.7 and 40 CFR 63.7520. The permittee shall maintain and operate each CMS as follows:

    a. The permittee shall maintain and operate each CMS in a manner consistent with safety and good air pollution control practices for minimizing emissions, as specified in 40 CFR 63.6(e)(1).

    b. The permittee shall keep the necessary parts for routine repairs and maintenance of the CMS equipment readily available.

    c. All continuous emissions monitoring system (CMS) must be installed at a location that accurately measures the exhaust emissions representative of the emissions unit (e.g., downstream of the last control device) and according to the procedures documented in the applicable performance specification; and any continuous parameter monitoring system (CPMS) shall be installed to accurately measure the process and/or the control device parameters.

d. Verification of the operational status of each CMS shall include the completion of the manufacturer's written specifications or the recommendations for installation, operation, and calibration of the system.

e. The read out, (the visual display or measured record of the CMS) or other indication of operation, from any CMS required for compliance with the emission standard, shall be readily accessible for operational control and visible for monitoring and recording by the operator of the equipment.

f. Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS shall be maintained in continuous operation.

g. All CMS for measuring emissions (other than opacity) shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive minute of operations (Ohio policy), with an average recorded for each 15-minute period. Data from the CEMS (excluding that collected during calibration, quality assurance, or maintenance activities, out-of-control periods, and/or CEMS breakdown) shall be reduced to 1-hour averages, computed from the four 15-minute averages.

h. All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(Authority for term: 40 CFR 63.8(c)(1) through (4) and 40 CFR 63.8(g)(2))

c) Monitoring and/or Recordkeeping Requirements

1. For each boiler burning more than one type of fuel, an initial fuel analysis must be conducted for each non-exempt fuel burned in the boiler in accordance with 40 CFR 63.7521 and Table 6 to Part 63 Subpart DDDDD. An initial fuel analysis shall be conducted in conjunction with the initial performance test. Fuel analyses are not required for fuels used for only startup, unit shutdown, and transient flame stability purposes; and fuel analyses are not required for boilers that burn a single type of fuel, or for natural gas, refinery gas, or other gas 1 fuels. An initial fuel analysis is required for non-exempt fuels burned in the boiler(s) and subject to emission limits for Hg and HCl in Table 2 to the subpart. For solid and liquid fuels an initial fuel analyses must be conducted for Cl and Hg; and for gaseous fuels, not exempted in 40 CFR 63.7510(a)(2)(i) and (ii), an initial fuel analysis must be conducted for Hg. The maximum Cl and Hg input shall be calculated in accordance with 40 CFR 63.7530(b) using Equations 7 (for Cl), 8 (for Hg), and 9 (for TSM).

(Authority for term: 40 CFR 63.7510(a)(2) and (b) and 40 CFR 63.7530(a) and (b))

2. If demonstrating compliance with HCl, Hg, or TSM through fuel analyses, monthly fuel analyses must be conducted according to the procedures found in 40 CFR 63.7521 and Table 6 to this subpart and the site-specific fuel analyses plan. If each of 12 consecutive monthly fuel analyses demonstrates emissions to be 75% or less of the HCl, Hg, and/or TSM emission limit, the fuel analysis frequency may be conducted quarterly, instead of

monthly, for the pollutant and fuel meeting this exception. With any fuel analysis showing 75% of the applicable emission limit(s) to be exceeded, fuel sampling and analyses will revert to monthly until another 12 consecutive months demonstrate the emissions to be 75% or less of the applicable limit. Each monthly fuel sample collected for analyses must be separated by at least 14 calendar days from the previous sample collected for analyses. The maximum Cl, Hg, and TSM (if opting to comply with TSM) input shall be calculated in accordance with 40 CFR 63.7530(b) using Equations 7 (for Cl), 8 (for Hg), and 9 (for TSM); and the HCl, Hg, and TSM emission rates shall be calculated in accordance with 40 CFR 63.7530(c) using Equations 15 (for 90th percentile confidence level pollutant concentration), 16 (for HCl), 17 (for Hg) and 18 (for TSM). The data, calculated to pounds of pollutant per MMBtu per Table 6, shall be reduced to 12-month rolling averages at the end of 12 months. The rolling 12-month average emissions, established through the monthly fuel analyses, shall be maintained at or below the applicable emission limit for HCl, Hg, or TSM as identified in Table 2 to Subpart DDDDD. A fuel analysis(es) must be conducted before burning a new fuel not previously tested.

(Authority for term: 40 CFR 63.7505(c), 40 CFR 63.7510(a)(2) and (b), 40 CFR 63.7515(e), 40 CFR 63.7521, 40 CFR 63.7530(b) and (c), and 40 CFR Part 63, Subpart DDDDD Table 8 #8)

3. Where demonstrating compliance with an opacity limit using a continuous opacity monitoring system (COMS), it shall be installed, operated, and certified according the procedures specified in 40 CFR 63.7525(c), 40 CFR 63.8, and Performance Specification 1 from Appendix B to 40 CFR Part 60. Performance evaluations of the COMS shall be conducted according to Performance Specification 1 and 40 CFR 63.8(e). The COMS must complete a minimum of 1 cycle of sampling and analyzing for each successive 10-second period and 1 cycle of data recording for each successive 6-minute period. The data must be reduced to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period, as specified in 40 CFR 63.8(g)(2), and the daily block average shall be calculated. The site-specific monitoring plan must include procedures and acceptance criteria for operating and maintaining each COMS, including at a minimum a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit. Records shall be maintained for all periods when the COMS is out of control (a deviation from the monitoring requirements), including any periods the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit.

   (Authority for term: 40 CFR 63.7525(c), 40 CFR 63.8, and 40 CFR Part 63, Subpart DDDDD Table 8 #1)

4. For a boiler equipped with fabric filter control and demonstrating compliance using a bag leak detection system, it shall be installed, calibrated, and maintained in accordance with 40 CFR 63.7525(j) and operated so that the alarm does not sound more than 5% of the operating time during each 6-month period. Corrective action must be initiated within 1 hour of an alarm; and records must be maintained for the date, time, and duration of each alarm, the time corrective action was initiated and completed, the cause of the alarm and corrective actions taken. A record must be kept for the percent of the operating time during each 6-month period that the alarm sounds. Performance evaluations shall be conducted in accordance with the site-specific monitoring plan and

shall be consistent with the guidance provided in EPA-454/R-98-015 (see 40 CFR 63.14).

(Authority for term: 40 CFR 63.7525(j), 40 CFR 63.7530(b)(4), 40CFR 63.7540(a)(7), and 40 CFR Part 63, Subpart DDDDD Tables 4 #3 and 8 #3)

5. Each boiler designed to burn coal/solid fuels or heavy liquid fuels and having an annual average heat input greater than 250 MMBtu from coal/solid fuels or heavy liquid fuels and demonstrating compliance with the PM limit, must be equipped with a PM CPMS. Where demonstrating compliance using PM CPMS, each monitor must be installed, certified, operated, and maintained according to the requirements identified in 40 CFR 63.7525(b) and the site-specific monitoring plan. Compliance shall be based on the arithmetic 30-day rolling average PM CPMS output data, recorded in milliamps, PM concentration, or other raw data signal value, collected during all boiler operating hours.

   (Authority for term: 40 CFR 63.7525(b), 40 CFR 63.7540(a)(9), and 40 CFR Part 63, Subpart DDDDD Table 8 #2)

6. The wet PM scrubber shall be equipped with CPMS to measure the pressure drop and liquid flow rate. The CPMS shall complete a minimum of one cycle of sampling and analyzing for each successive 15-minute period, with a minimum of 4 successive cycles of operation for each valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, and out of control periods, all readings shall be used to calculate the 30-day rolling average pressure drop and liquid flow rate for each operating day. Performance evaluations shall be conducted at the time of each performance test and no less frequently than annually, with daily checks of the pressure drop for obstruction or pluggage.

   (Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d), (e), and (f), and 40 CFR Part 63, Subpart DDDDD Tables 4 #1 and 8 #4)

7. The wet acid gas (HCl) scrubber shall be equipped with CPMS to measure the effluent pH, liquid flow rate, and pressure drop. The CPMS shall complete a minimum of one cycle of operation for each successive 15-minute period, with a minimum of 4 successive cycles of operation for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, and out of control periods, all readings shall be used to calculate the 30-day rolling average pH and liquid flow rate for each operating day. Performance evaluations shall be conducted at the time of each performance test and no less frequently than annually for the pressure and flow monitors and quarterly for the pH monitor (including a 2-point calibration with buffer solutions); with daily checks of the pH and the pressure drop (for obstruction or pluggage).

   (Authority for term: 40 CFR 63.7530(b)(4)(i), 40 CFR 63.7525(d), (e), (f), and (g)], and 40 CFR Part 63, Subpart DDDDD Tables 4 #2 and 8 #5)

8. The electrostatic precipitator (ESP) and wet scrubber shall be equipped with aCPMS to measure the total secondary electric power input (voltage and current) to the precipitator collection plates. The CPMS shall complete a minimum of one cycle of operation for each successive 15-minute period, with a minimum of 4 successive cycles of operation for one valid hour of data. Except for data recorded during monitoring malfunctions,

quality assurance activities, monitor repairs, and out of control periods, all readings shall be used to calculate the 30-day rolling average total secondary electric power input for each operating day. Performance evaluations shall be conducted for the CPMS at the time of each performance test and no less frequently than annually.

(Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d) and (h), 40 CFR Part 63, Subpart DDDDD Table 4 #4)

9. For a boiler equipped with a dry control electrostatic precipitator (ESP) and not required to install PM CPMS, the opacity shall be maintained at less than or equal to 10% as a daily block average and COMS shall be installed, certified, operated, and maintained to meet the requirements of 40 CFR 63.7525(c) and 40 CFR 63.8.

(Authority for term: 40 CFR Part 63, Subpart DDDDD Table 4 #4a and Table 8 #1)

10. The dry scrubber shall be equipped with a CPMS to measure the sorbent injection rate. The CPMS shall complete a minimum of one cycle of operation for each successive 15-minute period, with a minimum of 4 successive cycles of operation for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, and out of control periods, all readings shall be used to calculate the 30-day rolling average sorbent injection rate for each operating day. Performance evaluations shall be conducted at the time of each performance test and no less frequently than annually.

(Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d) and (i), and 40 CFR Part 63, Subpart DDDDD Tables 4 #5 and 8 #6)

11. The dry scrubber shall be equipped with a CPMS to measure the activated carbon injection rate. The CPMS shall complete a minimum of one cycle of operation for each successive 15-minute period, with a minimum of 4 successive cycles of operation for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, and out of control periods, all readings shall be used to calculate the 30-day rolling average carbon injection rate for each operating day. Performance evaluations shall be conducted at the time of each performance test and no less frequently than annually.

(Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d) and (i), and 40 CFR Part 63, Subpart DDDDD Tables 4 #5 and 8 #6)

12. For boilers subject to a CO emission limit and using the option to install an oxygen analyzer, the system shall monitor the oxygen in the boiler flue gas and it shall be installed, calibrated, and maintained in accordance with the manufacturer's recommendations.

(Authority for term: 40 CFR 63.7525(a), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD Tables 4 #9 and 8 #9)

13. For boilers subject to a CO emission limit and using the option to install an CO CEMS, the CEMS shall be install, certified, operated, and maintained in accordance with Performance Specification 4, 4A, or 4B of Part 60 Appendix B, 40 CFR 63.7525(a), and 40 CFR 63.8. The CO CEMS data shall be reduced as specified in 40 CFR 63(g)(2);

and the 1-hour arithmetic averages, corrected to 3% O_2 on a dry basis, and in part per million (ppm) CO concentration, shall be used to calculate each daily average, which shall be used to calculate a 30-day or 10-day (as applicable) rolling average CO concentration of the stack gas. Carbon monoxide must be continuously monitored in accordance with 40 CFR 63.7525(a) and 40 CFR 63.7535 and the records of CO levels must be maintained in accordance with 40 CFR 63.7555(b). Records shall also be maintained for the results of CO CEMS performance audits and the date(s) and duration of periods when the CO CEMS is out of control, including the corrective actions necessary to return the CO CEMS to operation consistent with the site-specific monitoring plan for CEMS.

(Authority for term: 40 CFR 63.7525(a), 40 CFR 63.7510(c), 40 CFR 63.7540(a)(8), 40 CFR 63.8, and 40 CFR Part 63, Subpart DDDDD Table 8 #10)

14. For boilers subject to a CO emission limit and using the option to install an oxygen trim system, the monitoring system shall maintain excess air at the desired level by providing a feedback signal to the combustion air controller. The permittee shall maintain the oxygen concentration of the stack gas at or above the lowest hourly average O_2 concentration measured during the most recent performance test (Method 10) demonstrating compliance with the CO limit.

    (Authority for term: 40 CFR 63.7525(a), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD Tables 4 #9 and 8 #9)

15. For boilers equipped with either a wet scrubber or dry sorbent injection system and subject to an HCl emission limit, and where choosing to establish an operating limit based on SO_2 CEMS, the SO_2 CEMS shall be installed, certified, operated, and maintained in accordance with Performance Specification 2 and Part 75 of Title 40, excluding the application of "bias adjustment factors" and "substitute data values" allowed per Part 75. For on-going quality assurance, the SO_2 CEMS must meet the applicable daily, quarterly, and semiannual or annual requirements in Sections 2.1 through 2.3 of Appendix B to Part 75; and, in addition, linearity checks must be performed as required in Section 2.2 if the SO_2 CEMS has a span value of 30 ppm or less. The SO_2 CEMS data shall be used to calculate each daily average, which shall be used to calculate a 30-day rolling average SO_2 concentration of the stack gas, which shall be maintained at or below the highest hourly average SO_2 concentration measured during the most recent compliant HCl performance test.

    (Authority for term: 40 CFR 63.7525(m), 40 CFR 63.7530(i), and 40 CFR Part 63, Subpart DDDDD Tables 4 #10 and 8 #11)

16. The permittee shall collect the operating load data or steam generation data every 15 minutes, in order to monitor and maintain the operating load such that it does not exceed 110% of the highest hourly average operating load established during the most recent performance test demonstrating compliance and in accordance with 40 CFR 63.7520(c).

    (Authority for term: 40 CFR 63.7520(c) 40 CFR Part 63, Subpart DDDDD Table 4 #8 and Table 8 #10)

17. The permittee shall only burn fuel types and fuel mixtures that were used to demonstrate compliance with the applicable emissions limit and shall maintain monthly records of fuel

usage in each boiler during each reporting period; and in order to demonstrate that all fuel types and mixtures of fuels burned would result in one of the following:

a. lower emissions of HCl, HG, and TSM than the applicable emission limit for each pollutant, if demonstrating compliance through fuel analysis; or

b. lower fuel input of Cl, Hg, and TSM than the maximum values calculated during the last performance test, if demonstrating compliance through performance testing.

(Authority for term: 40 CFR 63.7540(a)(2) and 40 CFR 63.7550(c))

18. In order to demonstrate continuous compliance with the requirements of the Part 63, Subpart DDDDD, the required monitoring and data collection systems must be operated at all times the boiler(s) is/are in operation, except for periods of monitoring system malfunction, out of control periods, and required monitoring system quality assurance and/or control activities, including calibration checks, required zero and span adjustments, and scheduled CMS maintenance, as defined in the site-specific monitoring plan. Monitoring system repairs in response to monitoring system malfunctions or out-of-control periods must be completed as expeditiously as practical.

(Authority for term: 40 CFR 63.7535(b))

19. Each flow monitoring system used to demonstrate continuous compliance shall meet the following requirements:

a. the flow sensor and other associated equipment shall be installed in a position that provides a representative flow;

b. the flow sensor shall have a measurement sensitivity of no greater than 2% of the design flow rate;

c. the effects of swirling flow or abnormal velocity distributions, due to upstream and downstream disturbances, shall be minimized consistent with good engineering practices; and

d. a performance evaluation of each flow monitoring system shall be conducted, in accordance with the monitoring plan, at the time of each performance test, but no less frequently than annually.

(Authority for term: 40 CFR 63.7525(e))

20. Each pressure monitoring system used to demonstrate continuous compliance shall meet the following requirements:

a. the pressure sensor shall be installed in a position that provides a representative measurement of pressure;

b. pulsating pressure, vibration, and internal and external corrosion shall be minimized or eliminated consistent with good engineering practices;

c. the pressure sensor shall have a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1% of the pressure monitoring system operating range, whichever is less;

d. the pressure sensor shall be checked at least once each operating day to ensure there is no obstructions or pluggage;

e. a performance evaluation of each pressure monitoring system shall be conducted, in accordance with the monitoring plan, at the time of each performance test but no less frequently than annually; and

f. if the measured pressure exceeds the manufacturer's specified maximum operating pressure range, a performance evaluation shall be conducted in accordance with the monitoring plan and a new pressure sensor shall be installed where required.

(Authority for term: 40 CFR 63.7525(f))

21. Each pH monitoring system used to demonstrate continuous compliance shall meet the following requirements.

g. the pH sensor shall be installed in a position that provides a representative measurement of scrubber effluent pH;

h. the sample shall be properly mixed and representative of the fluid to be measured;

i. a performance evaluation of the pH monitoring system shall be conducted, in accordance with the monitoring plan, and at least once each process operating day; and

j. performance evaluations, including a 2-point calibration with buffer solutions, shall be conducted at the time of each performance test and no less frequently than quarterly.

(Authority for term: 40 CFR 63.7525(g))

22. Each secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber shall meet the following requirements:

k. sensors shall be installed to measure secondary voltage and current to the precipitator collection plates; and

l. a performance evaluation of the electric power monitoring system shall be conducted, in accordance with the monitoring plan, at the time of each performance test but no less frequently than annually.

(Authority for term: 40 CFR 63.7525(h))

23. Where using a monitoring system to measure sorbent injection rate (e.g., weight belt, weigh hopper, or hopper flow measurement device) to demonstrate compliance, the system shall meet the following requirements:

    m. the sorbent injection rate measurement system shall provide a representative measurement of the total sorbent injection rate; and

    n. a performance evaluation of the sorbent injection monitoring system shall be conducted, in accordance with the monitoring plan, at the time of each performance test but no less frequently than annually.

    (Authority for term: 40 CFR 63.7525(i))

24. Where demonstrating compliance with the Hg standard using a CMS, a Hg CEMS may be installed, certified, maintained, and operated in accordance with Performance Specification 12A of Part 60 Appendix B; or a sorbent trap based integrated monitor may be installed and operated in accordance with Performance Specification 12B of Part 60 Appendix B. The CMS outlet data shall be calculated to pounds per MMBtu heat input using the equations in Method 19 of 40 CFR Part 60, Appendix A-7.

    (Authority for term: 40 CFR 63.7510(b), 40 CFR 63.7525(l), and 40 CFR 63.7540(a))

25. Where demonstrating compliance with the HCl standard using a CMS, aHCl CEMS may be installed, certified, maintained, and operated in accordance with Performance Specification 15 of Part 60 Appendix B. The CMS outlet data shall be calculated to pounds per MMBtu heat input using the equations in Method 19 of 40 CFR Part 60, Appendix A-7.

    (Authority for term: 40 CFR 63.7510(b), 40 CFR 63.7525(l) and 40 CFR 63.7540(a))

26. The permittee shall maintain records of the following information where a fuel analysis is required or used to demonstrate compliance:

    a. monthly records of the fuel(s) burned in each boiler, including the type of fuel, the amount burned, and the fraction of total heat input from each fuel type burned;

    b. a copy of the calculations and supporting documentation from the initial fuel analysis for the maximum amount of Cl entering the boiler through the fuel(s) burned in the unit, using Equation 7 of 40 CFR 63.7530(b)(1); and demonstrating compliance with the HCl emission standard through fuel analyses, a copy of all calculations completed to determine the 90th percentile confidence level pollutant concentration, in pounds per million Btu, using Equations 15 and 16 of 40 CFR 63.7530(c); and

    c. a copy of the calculations and supporting documentation from the initial fuel analysis for the maximum amount of Hg entering the boiler through the fuel(s) burned in the unit, using Equation 8 of 40 CFR 63.7530(b)(2); and if demonstrating compliance with the Hg emission standard through fuel analyses, a copy of all calculations completed to determine the 90th percentile confidence level pollutant concentration, in pounds per million Btu, using Equations 15 and 17 of 40 CFR 63.7530(c);

d. if demonstrating compliance with the TSM emission standard through fuel analyses, a copy of the calculations and supporting documentation of the maximum amount of TSM entering the boiler through the solid and/or liquid fuel(s) burned in the unit, using Equation 9 of 40 CFR 63.7530(b)(3); and if demonstrating compliance with the TSM emission standard through fuel analyses, a copy of all calculations completed to determine the 90th percentile confidence level pollutant concentration, in pounds per million Btu, using Equations 15 and 18 of 40 CFR 63.7530(c);

e. the monthly concentrations calculated to pounds of pollutant per MMBtu, and

f. following the first 12 months of compliance, the 12-month rolling average emissions for each pollutant for which compliance is being demonstrated through fuel analyses.

Supporting documentation shall include results of any fuel analyses and the basis for the estimates of the maximum Cl, Hg, and/or TSM input and the HCl, Hg, and/or TSM emission rates. The results from one fuel analysis can be used for all the boilers provided they are all burning the same fuel; however, the pollutant input and/or emission rates shall be calculated for each boiler.

(Authority for term: 40 CFR 63.7555(d)(4), (5), and (9), and 40 CFR 63, Subpart DDDDD Table 8 #8)

27. If burning a new fuel and compliance with an HCl or TSM emission limit for solid or liquid fuels, or the Hg emission limit was/were demonstrated through fuel analyses, the maximum Cl, Hg, and/or TSM input must be recalculated using Equations 7, 8, and/or 9 of 40 CFR 63.7530(b); and the emission rate must be recalculated using Equations 15 and 16, 17, and/or 18 of 40 CFR 63.7530(c). The recalculated HCl, Hg, and/or TSM emission rate must be less than the applicable emission limit(s). The Cl, Hg, and/or TSM concentration for any new fuel type must be determined in pounds per million Btu, based on supplier data or the facility's fuel analyses, and in accordance with the site-specific fuel analyses plan. The permittee shall determine the fuel(s) or mixture of fuels that will have the highest content of Cl, Hg, or TSM, which may include more than one type of fuel for analyses.

(Authority for term: 40 CFR 63.7540(a)(3), (5),and (17))

28. If compliance with the HCl or Hg emission limit was demonstrated through performance testing and a new fuel is to be used, the maximum Cl, Hg, and TSM (if complying with TSM) input must be recalculated using Equations 7, 8, and/or 9 of 40 CFR 63.7530. If the results of recalculating the maximum Cl or Hg input are found to be greater than the maximum established during the previous performance test, a new performance test must be conducted within 60 days of burning the new fuel and new operating limits must be established.

(Authority for term: 40 CFR 63.7540(a)(4), (6), and (16))

29. If complying with the alternative equivalent output-based emission limits, instead of the heat input-based limits in Table 2 to the subpart, the permittee may take credit for

implementing energy conservation measures identified in the energy assessment by establishing a benchmark from which emission efficiency credits may be generated. Efficiency credits can be generated if the energy conservation measures were implemented after 1/1/08 and sufficient information is available to determine the appropriate value of the credits. Shutdown boilers cannot be used to generate efficiency credits unless the facility can provide documentation linking the permanent shutdown to energy conservation measures identified in the energy assessment. The requirements for documenting the established benchmark and reductions from energy conservation are identified in 40 CFR 63.7533. The demonstration for efficiency credits must follow the requirements of 40 CFR 63.7533 and must be approved by the Director.

(Authority for term: 40 CFR 63.7533)

30. If electing to demonstrate that a gaseous fuel, other than natural gas or refinery gas, meets the specifications of an "other gas 1 fuel" and the gas constituents could vary above the specifications identified for an "other gas 1 fuel" (40 µg Hg/m^3), monthly fuel specification analyses for Hg is required and the gaseous fuel must be included in a/the site-specific fuel analyses plan. A single fuel sample for each such gaseous fuel type must be obtained in accordance with the sampling procedures listed in Table 6 to the subpart. The concentration of Hg in the fuel must be recorded in units of micrograms per cubic meter, on a dry basis, for each sample of "other gas 1 fuel" and the sampling and testing methods must be conducted in accordance with the procedures in Table 6 to the subpart. The sampling frequency for each "other gas 1 fuel" shall be conducted as follows:

    a. if the initial fuel analysis demonstrates that Hg constituents in the gaseous fuel are measured to be greater than 30 micrograms/m3 of Hg, monthly sampling and analyses shall be conducted;

    b. if 12 consecutive monthly fuel analyses demonstrates the Hg constituents to be less than or equal to 30 micrograms/m3 of Hg, semiannual sampling and analysis shall be conducted;

    c. if any semi-annual fuel analyses demonstrates the Hg constituents to exceed 30 micrograms/m3 of Hg, fuel sampling and analyses shall revert to monthly, until another 12 months of analyses can demonstrate the Hg constituents to be less than 30 micrograms/m3 of Hg;

    d. if the initial fuel analysis demonstrates that the Hg constituents in the gaseous fuels are measured to be equal to or less than 20 micrograms/m3 of Hg, no further sampling or fuel analysis is required;

    e. if the initial fuel analysis demonstrates that the Hg constituents in the gaseous fuels are measured to be greater than 20 micrograms/m3 of Hg but less than or equal to 30 micrograms/m3 of Hg, semiannual sampling and analysis shall be conducted;

    f. if following 6 consecutive semi-annual fuel analyses it can be demonstrated that the Hg constituents in the gaseous fuels are equal to or less than 20 micrograms/m3 of Hg, no further sampling or fuel analysis is required;

g. if the initial fuel analysis exceeds 40 micrograms/m3 of Hg, the boiler(s) burning this gaseous fuel shall not be considered as unit(s) designed to burn gas 1 subcategory fuels and shall instead be required to meet the emission and operating limits for the appropriate subcategory, unless future analyses can meet the requirements above.

(Authority for term: 40 CFR 63.7540(c), 40 CFR 63.7530(g), and 40 CFR 63.7521(f) through (i)

31. If meeting the requirements of a limited-use boiler, the operating hours and fuel usage records shall be maintained for each boiler that is operated under this subcategory. The boiler is restricted to a federally enforceable average annual capacity factor of no more than 10%.

(Authority for term: 40 CFR 63.7525(k) and 40 CFR 63.7575)

32. The permittee shall maintain records of the following information for the boiler(s) in order to meet the record keeping requirements of 40 CFR 63.7525, 40 CFR 63.7555, 40 CFR 63.10(b) and (c), and to demonstrate compliance with the Subpart DDDDD:

a. a copy of each notification and report that is submitted to comply with Part 63 Subpart DDDDD, including all documentation supporting the Initial Notification and all subsequent Notifications of Compliance Status and/or semiannual compliance reports;

b. records of performance test, opacity and/or visible emission observations, fuel analyses, and performance evaluations of CMS;

c. for each CEMS, COMS, and CMS the following records:

i. records required under 40 CFR 63.10(b)(2)

(a) all required measurements needed to demonstrate compliance with the applicable standard, including but not limited to the 15-minute, 1-hour, 12-hour, 10-day rolling, and/or 30-day rolling averages of CMS data, as applicable; the raw performance testing and performance evaluation measurements; and opacity data from COMS;

(b) the results of all performance tests, CMS performance evaluations, and opacity COMS data;

(c) all measurements as may be necessary to determine conditions of performance tests and performance evaluations;

(d) all CMS calibration checks; and

(e) all adjustments and maintenance performed on the CMS;

ii. monitoring data for COMS during performance evaluations;

iii. results of each inspection, calibration, validation check, system accuracy audits, and zero and span adjustments;

iv. each period of time when the CMS is malfunctioning, inoperative, or out of control and data is not available, to document each deviation;

v. previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3);

vi. the date and time that each deviation started and stopped;

d. the records required in Table 8 to the subpart, i.e., records of all monitoring data and calculated averages for the applicable operating limits, opacity, operating load, and oxygen concentration of exhaust stack, and reduced to the appropriate averaging periods;

e. the monthly fuel usage of each boiler, including the type(s) of fuel and amount(s) used;

f. a copy of the calculations supporting documentation of the maximum Cl fuel input using Equation 7 of 40 CFR 63.7530(b); and if demonstrating compliance with the HCl emission limit through fuel analyses, the HCl emission rate using Equation 16 of 40 CFR 63.7530(c);

g. a copy of the calculations supporting documentation of the maximum Hg fuel input using Equation 8 of 40 CFR 63.7530(b); and if demonstrating compliance with the Hg emission limit through fuel analyses, the Hg emission rate using Equation 17 of 40 CFR 63.7530(c);

h. a copy of the calculations supporting documentation of the maximum TSM fuel input using Equation 9 of 40 CFR 63.7530(b); and if demonstrating compliance with the TSM emission limit through fuel analyses, the TSM emission rates using Equation 18 of 40 CFR 63.7530(c);

i. any records demonstrating stack test emissions were less than 75% of the applicable limit (or less than a special emission limit identified in footnote “a” to Table 2), and documentation that there were no changes made in source operations, air pollution control equipment, or fuel composition, to qualify for less frequent than annual stack testing;

j. the occurrence and duration (date and time) of each malfunction of any subject boiler and/or the associated air pollution control and monitoring equipment;

k. actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the equipment to normal operations;

l. records of the calendar date, time, occurrence, and duration or each startup and shutdown; and the record of the type(s) and amount(s) of fuels burned during each startup and shutdown;

m. if electing to demonstrate that the boiler meets the specification for Hg for units designed to burn gas 1 (subcategory) fuels, the monthly records (or frequency required by 40 CFR 63.7540(c)) of the calculations and results of the fuel specification for Hg in Table 6;

n. if burning an alternative fuel in a boiler designed to burn gas 1 (subcategory) fuels, i.e., fuels other than natural gas, refinery gas, or gaseous fuels subject to another subpart or part of the CFR, the records of the total hours per calendar year that the alternative fuel was burned and the total hours per calendar year that the boiler operated during periods of gas curtailment or gas supply emergencies;

o. if electing to demonstrate compliance through emissions averaging for existing boilers, the averaging implementation plan; and, in accordance with 40 CFR 63.7522 and 40 CFR 63.7541, all monthly calculations, including monthly records of heat input or steam generation; and after the first year, calculations for each rolling 12-months;

p. if electing to use efficiency credits from energy conservation measures to demonstrate compliance, according to 40 CFR 63.7533, a copy of the Implementation Plan and all data and calculations used to establish the efficiency credits;

q. for each boiler in the limited use subcategory, a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10%; and the fuel usage records for the days the boiler was operating;

r. for units that burn non-hazardous waste (except those burning homogeneous waste identified as exempt under section 129(g)(1) of the Clean Air Act) shall maintain the following records for the non-hazardous waste:

    i. if combusting non-hazardous secondary materials that have been determined not to be solid waste, a record that documents how the material meets each of the legitimacy criteria under 40 CFR 63.241.3(d)(1);

    ii. if combusting non-hazardous materials processed from discarded secondary materials, a record that documents how the operations that produced the fuel satisfy the definition of processing in 40 CFR 63.241.2;

    iii. if combusting a fuel that received a non-waste determination pursuant to the petition process submitted under 40 CFR 63.241.3(c), a record that documents how the fuel satisfied the requirements of the petition process; and

    iv. if combusting non-hazardous secondary materials as fuel per 40 CFR 63.241.4, records that document that the material is listed as a non-waste under 40 CFR 63.241.4(a);

s. records documenting that that each boiler operator has completed training for startup and shutdown procedures; and

t. for each startup and shutdown event, records documenting that the work practice standards of Table 3 #5 for startups and Table 3 #6 for shutdowns are met.

These records shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

*The information needed to demonstrate compliance with the SSMP plan may be recorded using a "checklist" or some other effective form of record keeping, in order to minimize the recording burden for conforming procedures.

(Authority for term: 40 CFR 63.7525(d), 40 CFR 63.7555 and 40 CFR 63.7560, and 40 CFR 63, Subpart DDDDD Table 3 #5 and #6)

33. Data recorded during monitoring system malfunctions or out-of-control periods, repairs, or required monitoring system quality assurance and control activities shall not be used in data averages and calculations used to report emissions or operating levels used for demonstrating compliance. Data collected during all other periods of time shall be used in assessing compliance with the emissions limits (CEMS) and the operating limits of the control device or system. Records shall be made available, upon request, of results of CMS performance audits and the dates and duration of each period when the CMS is out of control, to completion of the corrective actions needed to return the CMS to operation consistent with the site-specific monitoring plan and Tables 4 and 8 to Subpart DDDDD. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements.

(Authority for term: 40 CFR 63.7525(d) and 40 CFR 63.7535(c) and (d))

d) Reporting Requirements

1. The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.

(Authority for term: OAC rule 3745-15-03(B)(2) and OAC rule 3745-15-03(D))

2. The site-specific fuel analyses plan must be submitted no later than 60 days before the date of the intended initial compliance demonstration and it shall include the following information, as identified in 40 CFR 63.7521(b):

a. the identification of all fuel types anticipated to be burned in each boiler;

b. for each anticipated fuel type, a statement as to whether the fuel supplier or the facility will be conducting the fuel analyses;

c. for each anticipated fuel type, a detailed description of the sampling location(s) and specific procedures to be used for collecting and preparing composite samples if the procedures are different from those identified in 40 CFR 63.7521(c) or (d); and

d. for each anticipated fuel type, the analytical methods from Table 6, with the expected minimum detection levels to be used for the measurement of Cl or Hg.

(Authority for term: 40 CFR 63.7521(b)(2))

3. The permittee shall submit, to the appropriate Ohio EPA District Office or Local Air Agency, the following notifications in accordance with the applicable requirements of 40 CFR 63.7545, 40 CFR 63.7(b) and (c), 40 CFR 63.8(e) and (f)(4) and (6), and 40 CFR 63.9(b) through (h):

e. an Initial Notification that the source is subject to Part 63 Subpart DDDDD shall be submitted no later than 5/31/13 for any boiler with a startup date before 1/31/13; or

f. semiannual, annual, or 5 year (as applicable) compliance reports containing the information identified in 40 CFR 63.7550;

g. a Notification of Intent to conduct a performance test or CMS performance evaluation must be submitted at least 60 days before the performance test or performance evaluation is scheduled to begin; the notification must include the site specific test plan and site-specific performance evaluation test plan;

h. the Initial Notification of Compliance shall including all performance test and fuel analyses results completed to demonstrate compliance; and the notification must be submitted before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations. The Initial Notification of Compliance Status report must contain the following information:

i. A description of the facility boilers including:

(a) identification of the subcategory each boiler is in;

(b) the design heat input capacity of the/each unit;

(c) a description of the add-on controls used on each boiler;

(d) description of the fuel(s) burned,

(e) identification of fuel(s) that were determined to be a non-waste or fuel(s) processed from discarded non-hazardous secondary materials under 40 CFR 241.3; and

(f) the justification for the selection of fuel(s) burned during the compliance demonstration.

ii. a summary of the results of all performance tests and fuel analyses, including the calculations used to demonstrate initial compliance and the operating limits that have been established;

iii. identification of whether compliance will be demonstrated with the PM emission limit or the alternative TSM emission limit;

iv. identification of whether compliance will be demonstrated with the output-based emission limits (lb/MMBtu steam output or lb/MWh) or the heat input-based emission limits (lb/MMBtu or ppm);

v. if not using CO CEMS, a summary of the maximum carbon monoxide emission levels recorded during the performance test, demonstrating that the applicable emission standard in Table 2 has or has not been met;

vi. identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing, a CEMS, or fuel analysis;

vii. identification of any plan to demonstrate compliance by emissions averaging for existing boilers, which must contain the emission level that was being achieved or the control technology employed on 1/31/13, for each boiler participating in the averaging option;

viii. identification of any plan to demonstrate compliance by using efficiency credits through energy conservation;

ix. a signed certification that all applicable emission limits and work practice standards have been met.

x. a description of any deviation(s) from an emission limit, work practice standard, or operating limit, the duration of the deviation, and the corrective action taken.

xi. the following certification(s) of compliance, as applicable, must be signed by a responsible official:

(a) certification that the facility has complied with the required initial tune-up in accordance with 40 CFR 63.7540(a)(10)(i) through (vi);

(b) for existing units, certification that the facility has completed a one-time energy assessment performed according to 40 CFR 63.7530(e) and that it is an accurate depiction of the facility at the time of the assessment; and

(c) except for boilers burning natural gas, refinery gas, or other gas 1 fuel, certification that no secondary materials that are solid waste were combusted in any affected unit;

i. if the unit is designed to only burn natural gas, refinery gas, or "other gas 1 fuel", as defined in 40 CFR 63.7575;

j. if the unit is designed to burn natural gas, refinery gas, or other gas 1 fuels, and there are plans to use an alternative fuel during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, a notification of alternative fuel use must be submitted within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification must include the following information:

i. facility name and address;

ii. identification of the affected unit(s);

iii. the reason natural gas or equivalent fuel cannot be used;

iv. the date when the natural gas curtailment was declared or the natural gas supply interruption began;

v. the type of alternative fuel to be used; and

vi. the dates when the alternative fuel use is expected to begin and end.

k. if there are any plans to switch fuels or make a physical change to a boiler, and this fuel switch or change to the boiler may result in the applicability of a different subcategory, notification of the switch must be made at least 30 days prior to the date of the switch or change and this notification must identify:

i. the name of the facility, the location of the source, the boiler(s) that will switch fuels or were physically changed;

ii. the applicable subcategory of the boiler(s) before and after the switch;

iii. the date on which the fuel switch or physical change occurred;

iv. the planned date for the fuel to be switched; and

v. the date of the notice.

(Authority for term: 40 CFR 63.7545, 40 CFR 63.7530(e), (f), and (g), and 40 CFR 63.9(b) through (h))

4. The permittee shall submit each applicable report in Table 9 to Part 63, Subpart DDDDD. For boilers that are subject only to a requirement to conduct an annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(10), (11), or (12) respectively, and not subject to emission limits or operating limits, only an annual, biennial, or 5-year compliance report is required.

The first compliance report must cover the period beginning on the compliance date, 1/31/16 for existing boilers, and ending on June 30 or December 31, whichever date is the first date that occurs 180 days after the compliance date (or 1, 2, or 5 years, as

applicable, if submitting an annual, biennial, or 5-year compliance report). Unless otherwise approved, the first compliance report must be postmarked or submitted no later than July 31 or January 31, following the end of the first calendar half after the compliance date. The first annual, biennial, or 5-year compliance report must be postmarked or delivered no later than January 31. Each subsequent compliance report must be submitted in accordance with the same applicable schedule; and, except where only required to submit annual, biennial, or 5-year reports, must cover each semiannual reporting period from January 1st through June 30th and from July 1 through December 31 of each year.

(Authority for term: 40 CFR 63.7550(b))

5. The permittee shall submit semi-annual compliance reports and deviation reports as required per 40 CFR 63.7550 and Table 9 to Part 63 Subpart DDDDD, unless the boiler is only subject to an annual or 5-year tune-ups, where the compliance report will instead be submitted annually or every 5 years, correlating with the tune-up schedule identified in Table 3 to Subpart DDDDD. The compliance reports shall include the information identified in 40 CFR 63.7550(c) and deviation reports shall include the information identified in 40 CFR 63.7550(d) and (e). The Compliance Reports for Part 63, Subpart DDDDD must contain the following information as applicable for each boiler:

   a. the company and facility name and address;

   b. process unit information, emissions limitations, and operating parameter limitations;

   c. the date of report and beginning and ending dates of the reporting period;

   d. the total operating time during the reporting period;

   e. if using a CMS, including CEMS, COMS, or CPMS to demonstrate compliance, the monitoring equipment manufacturer(s) and model numbers, and date of the last certification or audit for each CMS;

   f. the total fuel use by each individual boiler subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure;

   g. a summary of the results of the annual performance tests for the boilers subject to an emission limit, a summary of any fuel analyses associated with performance tests, and documentation of the operating limits that were reestablished during the performance test;

   h. the calculated 30-day rolling average values based on daily CEMS (PM, CO and/or Hg) and CPMS data (PM CPMS output or parameter monitoring results);

   i. if qualifying for the less frequent than annual performance testing in accordance with 40 CFR 63.7515(b) or (c), where emissions are at or below 75% of the

applicable emission limit for 2 consecutive years, the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions;

j. a signed statement indicating that no new types of fuel were burned in each affected boiler subject to an emission limit; or, if a new type of fuel was used and subject to a HCl or Hg emission limit, or TSM if opting to comply with TSM standard:

   i. the calculation of the maximum Cl, Hg, and/or TSM input, using Equations 7 (for Cl), 8 (for Hg), or 9 (for TSM) of 40 CFR 63.7530(b), that demonstrates the unit is still within its maximum Cl, Hg, and/or TSM input level established during the previous performance testing; and

   ii. in addition, for boilers that demonstrate compliance through fuel analyses, the calculation of the HCl, Hg, and/or TSM emission rate using Equations 15 for the 90th percentile confidence level fuel pollutant concentration and Equations 16 (for HCl), 17 (for Hg), and/or 18 (for TSM) of 40 CFR 63.7530(c) that demonstrates the unit is still meeting the emission limit for HCl, Hg, and/or TSM;

k. if it cannot be demonstrated that a new type of fuel can comply with the applicable maximum Cl, Hg, and/or TSM input using Equation 7, 8, or 9 of 40 CFR 63.7530(b), a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel;

l. a summary of any monthly fuel analyses conducted to demonstrate compliance according to 40 CFR 63.7521 and 40 CFR 63.7530 and calculated emissions for individual boilers subject to emission limits; and following the first 12 months of compliance, the rolling 12-month average emissions for each month during the compliance period;

m. any fuel specification analyses conducted in accordance with 40 CFR 63.7521(f) and 40 CFR 63.7530(g);

n. if electing to demonstrate that a gaseous fuel meets the specification of “other gas 1 fuel”, as defined in 40 CFR 63.7575, a signed certification stating that the fuel analyses, conducted in accordance with 63.7521(f) through (i) and at the frequency identified in 40 CFR 63.7540(c), demonstrates that the Hg constituents in the gaseous fuel will never exceed 40 micrograms/m3 of Hg;

o. if there are no deviations from any emission limits or operating limits, a statement that there were no deviations from the emission limits or operating limits during the reporting period;

p. if there were no deviations from the monitoring requirements including no periods during which the CMSs (CEMS, COMS, and CPMS), were out of control as specified in 40 CFR 63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period;

q. if a malfunction occurred during the reporting period, the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded;

r. a description of actions taken during a malfunction of a boiler, or associated air pollution control device or CMS to minimize emissions in accordance with 40 CFR 63.7500(a)(3), including actions taken to correct the malfunction;

s. the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(10), (11), or (12) respectively; and include the date of the most recent burner inspection if the tune-up was not done annually, biennially, or on a 5-year period, as applicable, if delayed until the next scheduled or unscheduled shutdown;

t. if demonstrating compliance through emission averaging, certification that the emission level achieved or the control technology employed is no less stringent that the level or control technology contained in the notification of compliance status;

u. if subject to an emission limit in Table 2 to Subpart DDDDD, the date of each startup and shutdown event during the compliance period; and either a statement affirming that the work practice standards identified in Table 3 #5 and #6 were met; or identification of the work practice standards identified in Table 3 that were not met;

v. a statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;

w. for each deviation from an emission limit or operating limit that occurs at each individual boiler that is not monitored by a CMS to comply with the emission limit or operating limit, the following information is required:

   i. a description of the deviation and which emission limit or operating limit was exceeded or not met;

   ii. information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken; and

   iii. if the deviation occurred during an annual performance test, the date the annual performance test was completed;

x. for each deviation from an emission limit, operating limit, and monitoring requirement, including a deviation from the site-specific monitoring plan, where a CMS is used to demonstrate compliance, the following information is required:

   i. the date and time that each deviation started and stopped and description of the nature of the deviation;

ii. the date and time that each CMS was inoperative, except for zero (low-level) and high-level checks;

iii. the date, time, and duration that each CMS was out of control, including the information in 40 CFR 63.8(c)(8);

iv. the date and time that each deviation started and stopped;

v. a summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period;

vi. a characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;

vii. a summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period;

viii. a brief description of the source for which there was a deviation;

ix. a description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation; and

x. the date of the latest CMS certification or audit for the system for which there was a deviation.

(Authority for term: 40 CFR 63.7550(a) through (e), 40 CFR 63.7535(d), 40 CFR 63.7540(b), 40 CFR 63.7515(f), and 40 CFR Subpart DDDDD Tables 8 and 9)

6. Within 60 days after the date of completing each performance test, associated fuel analyses, CEMS performance evaluations, and/or relative accuracy test audits, the test results and compliance reports required in 40 CFR 63.7550(b) must be submitted electronically to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (http://www.epa.gov/cdx). Performance test data must be submitted in the file format generated through EPA's Electronic Reporting Tool (ERT) at *http://www.epa.gov/ttn/chief/ert/index.html*. Only data collected using test methods on the ERT website are subject to being submitted electronically to WebFire. Test data must also be submitted to the Ohio EPA through the "eBusiness Center, Air Services" website.

(Authority for term: 40 CFR 63.7550(h), 40 CFR 63.72525(b)(5)(iv), and 40 CFR 63.7515(f))

e) Testing Requirements

1. Emission Limitations:

The emissions from this/these boiler(s) shall not exceed the following emission limits or the limitations specified in the most recent amendment to 40 CFR Part 63, Subpart DDDDD in:

For units designed to burn solid fuel (B003 & B004):

Hydrochloric acid (HCl) emissions shall not exceed 2.2E-02 pound per million Btu of heat input.

Mercury (Hg) emissions shall not exceed 5.7E-06 pound per million Btu of heat input.

For units designed to burn liquid fuel (B005):

HCl emissions shall not exceed 1.1E-03 pound per million Btu of heat input.

Hg emissions shall not exceed 2.0E-06 pound per million Btu of heat input.

For units designed to burn heavy liquid fuel (B005):

Filterable particulate matter (PM) shall not exceed 6.2E-02 pound per million Btu of heat input.

Carbon monoxide (CO) emissions shall not exceed 0.13 pound per million Btu of steam output, 3-run average.

For stoker units designed to burn wet bio-mass fuel (B003 & B004):

Filterable PM shall not exceed 3.7E-02 pound per million Btu of heat input.

CO emissions shall not exceed 1.4 pounds per million Btu of steam output, 3-run average.

Applicable Compliance Method:

For existing boilers, the permittee shall conduct an initial performance test on or before 7/29/16 to demonstrate compliance with the requirements of Part 63 Subpart DDDDD. The appropriate tests methods from Table 5 to Subpart DDDDD shall be conducted while establishing operating limits in accordance with Table 7 to the subpart. Boilers equipped with CEMS for Hg are exempt from the performance testing requirements for Hg and the sorbent or carbon injection operating limits for a dry scrubber if meeting the performance evaluation and certification requirements for Hg CEMS and 40 CFR 63.7540(a)(14). Boilers equipped with CEMS for HCl are exempt from the performance testing requirements for HCl and the effluent pH and liquid flow rate operating limits for a wet acid gas scrubber if meeting the performance evaluation and certification requirements for HCl CEMS and 40 CFR 63.7540(a)(15).

Performance testing must be conducted on an annual basis in accordance with 40 CFR 63.7520 and completed no more than 13 months after the previous performance test. If after 2 consecutive years the emissions of a pollutant identified in Table 2 are at or below 75% of the emissions limit for that pollutant and there have been no changes in the operation of the boiler or air pollution control equipment that could increase emissions, performance testing may revert to every 3 years, or no more than 37 months after the previous test, for the pollutant. If the pollutant exceeds 75% of the applicable limit, testing shall revert back to annually, until the performance tests over another consecutive 2-year period have demonstrated the emissions to be at or below 75% of the applicable emission limit identified in Table 2. For each existing boiler in which compliance is demonstrated through emissions averaging, performance testing shall remain annually. The average operating load must be recorded during each performance test.

Following an initial compliant performance test with the emission limits in Table 2, further performance tests are not required for a boiler designed to burn light liquid fuels and that only burns ultra-low sulfur liquid fuel, if the fuel is monitored and monthly records can demonstrate that only ultra-low sulfur liquid fuel is burned in the boiler.

Performance testing is not required for boilers designed to burn gas 1 fuels subcategory, where monthly records can document the fuel usage and that it meets the specifications of “gas 1 fuel”. Following the compliance test date, a performance test must be conducted for each new fuel not meeting the specifications of “gas 1 fuel” within 60 days of first burning it.

If an affected boiler and a non-affected unit(s) vent(s) to a common stack, the non-affected unit(s) must be shut down or vented to a different stack during the performance test, unless compliance can be demonstrated with the non-affected units venting to the stack during the performance demonstration.

The following test method(s) shall be employed, in accordance with Table 5 to Subpart DDDDD, to demonstrate compliance with the allowable mass emission rate(s)*:

Method 1, Appendix A-1, Part 60 to select the sampling ports locations and number of traverse points;

Method 2, 2F, or 2G, Appendix A-1 or A-2, Part 60 to determine the velocity and volumetric flow-rate of the stack gases;

Method 3A or 3B, Appendix A-2, Part 60, or ANSI/ASME PTC19.10 to determine the oxygen and/or carbon dioxide concentrations, excess air, and dry molecular weight of the stack gases; or

Performance Specification 3, Appendix B of 40 CFR Part 60 for O2 or CO2 CEMS;

Method 4, Appendix A-3, Part 60 to measure the moisture content of the stack gases;

Method 5 (positive pressure fabric filters shall use Method 5D) or 17 Appendix A-3 or A-6, Part 60 for PM emission concentration;

Method 7, 7A, 7C, 7D, or 7E, Appendix A, Part 60, as appropriate, if subject to OAC 3745-110, the NOx RACT;

Method 10 Appendix A-4, Part 60 to measure the CO emission concentration; or

Performance Specification 4, 4A, or 4B, Appendix B of 40 CFR Part 60 for CO CEMS, and Performance Specification 3, Appendix B of 40 CFR Part 60 for O2 CEMS and compliance with 40 CFR 63.7525(a) and 40 CFR 63.7540(a)(8)***;

Method 26 or 26A, Appendix A-8, Part 60 to measure HCl emissions concentrations; or

Performance Specification 15, Appendix B of 40 CFR Part 60 for HCl CEMS and compliance with 40 CFR 63.7525(l) and 40 CFR 63.7540(a)(15)**;

Method 29 Appendix A-8, Part 60 for the TSM emission concentration;

Method 29, 30A, or 30B, Appendix A-8, Part 60; or Method 101A in Appendix B to Part 61; or ASTM Method D6784 for the Hg emission concentration; or

Performance Specification 12A, Appendix B of 40 CFR Part 60 for Hg CEMS and compliance with 40 CFR 63.7525(l) and 40 CFR 63.7540(a)(14)**;

Method 19 F-factor methodology, Appendix A-7 to Part 60 to convert PM, HCl, Hg, and TSM concentrations to pound per MMBtu emission rates; and

COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test, where compliance with the opacity limitation is met by using COMS data.

* Except for 30-day rolling averages based on CEMS (or sorbent trap systems), if measurement results for any pollutant are reported as below the analytical method's detection level, the method detection level shall be used as the measured emission level in calculating compliance (40 CFR 63.7520(f)).

** Per 40 CFR 63.7510(b), boilers using Hg and/or HCl CEMS are not required to have a performance test conducted for Hg and/or HCl and are not subject to the operating limit requirements for Hg and/or HCl, if the meet the requirements of 40 CFR 63.7525(l) and 40 CFR 63.7540(a)(14) for Hg and/or 40 CFR 63.7540(a)(15) for HCl.

*** Per 40 CFR 63.7515(i), boilers using CO and O2 CEMS are not required to have a performance test conducted for CO and are not subject to the oxygen concentration operating limit if the CEMS meet the requirements of 40 CFR 63.7525(a) and 40 CFR 63.7540(a)(8).

Sampling sites shall be located after the control device and prior to any releases to the atmosphere.

a. To determine compliance with the emission limitations from Subpart DDDDD, the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of Appendix A to part 60 shall be used to convert the measured PM or TSM, HCl, and Hg concentrations from the performance test, to pounds per million Btu heat input emission rates.

b. Each performance test shall consist of 3 separate runs as specified in 40 CFR 63.7(e)(3), using the applicable test methods in Table 5. Each test run shall last at least one hour and shall be conducted under the conditions specified in Tables 5 and 7, and must met the minimum sampling times and volumes specified in the last column of Table 2 for existing boilers.

c. During each performance test the maximum operating load shall be established by collecting the operating load or steam generation data every 15 minutes during the entire performance test. The average operating load shall be computed from the hourly averages using all of the 15-minute readings taken during each performance test. The maximum operating load shall be calculated as the average of the 3 test runs established during the most recent performance tests multiplied by 1.1 (110%).

d. The performance tests shall be conducted while the boiler is operating at representative operating load conditions, while burning the mixture(s) of fuel containing the highest content of Cl, Hg, and TSM if complying with the alternative standard for PM. These requirements could result in the need to conduct more than one performance test. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of the performance test. The permittee shall make available to the Ohio EPA, Division of Air Pollution Control, Central Office or the appropriate District Office or local air agency, upon request, any records that may be necessary to determine the conditions of the performance tests.

e. In order to establish the site-specific operating limits as required by 40 CFR 63.7530(b)(4) and Table 4 to Subpart DDDDD, the permittee shall collect and record the appropriate parameters for the control device, in accordance with Table 7 to the subpart, every 15 minutes during each performance test. The minimum operating parameters shall be established as follows:

   i. When conducting a compliance demonstration for PM or TSM, or Hg and using a wet PM scrubber, the permittee shall collect and record the scrubber pressure drop and liquid flow-rate data every 15 minutes during the entire period of the performance tests and compute the hourly averages using all of the 15-minute readings taken during each performance test. The minimum scrubber pressure drop and minimum liquid flow rate shall be determined based on the lowest hourly average

scrubber pressure drop and lowest hourly average liquid flow rate measured during the most recent performance tests demonstrating compliance; and shall be established as the minimum operating parameters for the wet scrubber.

ii. When conducting a compliance demonstration for PM or TSM, or Hg and using an electrostatic precipitator, the permittee shall collect and record the secondary voltage and secondary amperage for each ESP cell, calculate the total secondary electric power input data every 15 minutes during the entire period of the performance tests, and compute the hourly averages using all of the 15-minute readings taken during each performance test. The minimum total secondary electric power shall be determined based on the lowest hourly average total secondary electric power input measured during the most recent performance tests demonstrating compliance; and shall be established as the minimum operating parameter for the ESP.

iii. When conducting a compliance demonstration for HCl and using a wet scrubber, the permittee shall collect and record the pH and liquid flow-rate data every 15 minutes during the entire period of the performance tests, and compute the hourly averages using all of the 15-minute readings taken during each performance test. The minimum scrubber effluent pH and minimum scrubber liquid flow rate shall be determined based on the lowest hourly average sorbent liquid pH measured at the inlet to the wet scrubber and the lowest hourly liquid flow rate measured during the most recent performance tests demonstrating compliance with the HCl limit; and shall be established as the minimum operating parameters for the wet scrubber.

iv. When conducting a compliance demonstration for HCl and using a dry scrubber, the permittee shall collect and record the sorbent injection rate data every 15 minutes during the entire period of the performance tests, and compute the hourly averages using all of the 15-minute readings taken during each performance test. The minimum sorbent injection rate shall be determined based on the lowest hourly average sorbent injection rate measured during the most recent performance tests demonstrating compliance with the HCl limit; and shall be established as the minimum operating parameters for the dry scrubber at the load fraction maintained during the performance test. When operating at lower loads, the minimum sorbent injection rate shall be determined by multiplying the sorbent injection rate operating limit established during the performance test by the operating load fraction of the boiler.

v. When conducting a compliance demonstration for Hg and using a dry scrubber with activated carbon injection, the permittee shall collect and record the activated carbon injection rate data every 15 minutes during the entire period of the performance tests, and compute the hourly averages using all of the 15-minute readings taken during each performance test. The minimum activated carbon injection rate shall be

determined based on the lowest hourly average activated carbon injection rate measured during the most recent performance tests demonstrating compliance with the Hg limit; and shall be established as the minimum operating parameters for the dry scrubber at the load fraction maintained during the performance test. When operating at lower loads, the minimum activated carbon injection rate shall be determined by multiplying the sorbent injection rate operating limit established during the performance test by the operating load fraction of the boiler.

vi. For boilers equipped with either a wet scrubber or dry sorbent injection system and subject to an HCl emission limit, and where choosing to establish an operating limit using SO2 CEMS, the permittee shall establish the unit-specific maximum SO2 operating limit by continuously monitoring SO2 and calculating the hourly average SO2 emission rate during the 3-run performance test for HCl. The maximum SO2 operating limit shall be equal to the highest hourly average SO2 concentration measured during the HCl performance test; and the CEMS data shall be calculated on a 30-day rolling average basis to demonstrate compliance with this maximum concentration. On-going quality assurance shall be established by meeting the daily, quarterly, semiannual, and/or annual requirements of Part 75, Appendix B Sections 2.1 through 2.3; and linearity checks (required in Section 2.2) must be performed if the SO2 CEMS has a span value of 30 ppm or less. The performance evaluation, using Performance Specification 2, shall be conducted no later than 180 days following the applicable compliance date, or by 7/29/16 for existing boilers, and within 180 days following startup of an existing boiler starting operations following the compliance date, where the boiler has not been in operation.

vii. Where demonstrating compliance with a CO limit, the minimum oxygen level operating limit shall be established as the lowest hourly average measured during the most recent performance test demonstrating compliance with the CO limit.

f. If using a wet scrubber and conducting separate performance tests for HCl and Hg emissions, one set of minimum scrubber effluent pH, liquid flowrate, and pressure drop operating limits shall be established. The minimum scrubber effluent pH operating limit shall be established during the HCl performance test; and the minimum liquid flowrate operating limit shall be set at the higher of the minimum values established during the performance tests.

g. The permittee shall notify the appropriate Ohio EPA, Division of Air Pollution Control, District Office or local air agency in writing and at least 60 calendar days before a performance test is initially scheduled to begin, of plans to conduct a performance test. If a performance evaluation of the COMS or CEMS is to be conducted at the same time, the Division of Air Pollution Control's Central Office shall also be notified. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the monitored 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 Division of Air Pollution Control's refusal to accept the results of the emission test(s).

h. Personnel from the appropriate Ohio EPA, Division of Air Pollution Control, District Office, local air agency, or Central 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 each emissions unit and the testing procedures provide a valid characterization of the emissions from each emissions unit and/or the performance of the baghouse and wet scrubber.

i. 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 shall be submitted to the appropriate Ohio EPA, Division of Air Pollution Control, District Office or local air agency within 30 days following completion of the test(s).

j. In the event the permittee is unable to conduct the performance test on the date specified in the notification requirement due to unforeseeable circumstances beyond control, the permittee shall notify the appropriate Ohio EPA, Division of Air Pollution Control, District Office or local air agency as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the permittee of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable federal, State, or local requirement.

k. The permittee shall maintain performance test results and any other data needed to determine emissions from each emissions unit for a minimum of 5 years after the testing is conducted or after the data is collected. These records shall be made available for inspection by the Director of the Ohio EPA or his/her representative, upon request.

(Authority for term: 40 CFR 63.7520, 40 CFR 63.7500(a), 40 CFR 63.7510, 40 CFR 63.7515, 40 CFR 63.7522(j)(2), 40 CFR 63.7525(l)(8) and (m), 40 CFR 63.7530(a), (b)(4)(i), (iv) through (ix), (h), and (i), 40 CFR 63.7545(d), 40 CFR 63, Subpart DDDDD Tables 4, 5, 7, and 8; for the Table 2 limits, 40 CFR 63.6(h)(7)(iii), 40 CFR 63.7, 40 CFR 63.10(d), OAC 3745-110, and OAC 3745-15-04(A))

2. Emission Limitation:

Carbon Monoxide shall not exceed the applicable limitation identified in Table 2 in Part 63, Subpart DDDDD, in ppm by volume on a dry basis, corrected to 3 % oxygen; and

The oxygen content must be maintained at or above the lowest hourly average O2 level measured during the most recent CO performance test.

Applicable Compliance Method:

Each boiler subject to a CO emission limit in Table 2 to Subpart DDDDD, shall be equipped with either an oxygen analyzer system, as defined in 40 CFR 63.7575, or CEMS for both CO and oxygen. The initial compliance demonstration for CO shall

include a performance test for CO according to Table 5 (Method 3A or 3B) to the subpart or conduct a performance evaluation of the CEMS for CO. Compliance with the CO standard shall be demonstrated as follows and as applicable depending on the compliance option:

a. Where electing to install CEMS for CO and O_2 the following requirements shall be met:

i. The CO CEMS shall be installed, certified, operated, and maintained in accordance Performance Specification 4, 4A, or 4B at 40 CFR Part 60, Appendix B.

ii. The O2 CEMS shall be installed, certified, operated, and maintained in accordance Performance Specification 3 at 40 CFR Part 60, Appendix B.

iii. The CO CEMS, O2 CEMS, and/or oxygen analyzer shall be installed certified, operated, and maintained in accordance with the site-specific monitoring plan, and the requirements in 40 CFR 63.7525(a) and 63.7540(a)(8).

iv. The CO and oxygen levels shall be monitored at the same location at the outlet of the boiler's control device.

v. The permittee shall conduct, or have conducted, performance evaluations of the CO CEMS on or before 7/29/16 for existing boilers. The performance evaluation of each CO CEMS shall be conducted in accordance with Performance Specification 4, 4A, or 4B (from 40 CFR Part 60 Appendix B), and as required in 40 CFR 63.7525(a), 40 CFR 63.8(e), and the performance evaluation test plan.

vi. Relative accuracy testing of the CO CEMS must be conducted concurrently (or within a 30 to 60 minute period) with Method 10, 10A, or 10B, 40 CFR Part 60, Appendix A-4 and the boiler must be operating at representative conditions.

vii. Quality assurance procedures, i.e., quarterly accuracy determinations and daily calibration drift tests, shall follow Procedure 1 of Appendix F to Part 60.

viii. The measurement span value of the CO CEMS shall be 2 times the applicable CO emission limit, expressed as a concentration.

ix. The CO and O2 CEMS data shall be collected concurrently.

x. The CO and O2 CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive minute of operations (Ohio policy), with an average recorded for each 15-minute period. Data from the CEMS (excluding that collected during calibration, quality assurance, or maintenance activities, out-of-control periods, and/or CEMS breakdown) shall be reduced to 1-hour averages,

computed from the four 15-minute averages and corrected to 3% oxygen on a dry basis, in ppm.

xi. At least two 15-minute data values must be collected during any hour when CEMS calibration, quality assurance, or maintenance activities are being performed.

xii. Equation 19-19 in Section 12.4.1 of Method 19 at Part 60 Appendix A-7 shall be used for calculating the average CO concentration from the hourly values. The 1-hour arithmetic averages shall be used to calculate the 30-day or 10-day rolling averages, as applicable.

xiii. The permittee shall submit written notification of the date of the CEMS performance evaluation to both the Central Office and the appropriate District Office or local air agency of the Ohio EPA, Division of Air Pollution Control, at least 60 days prior to the date the performance evaluation is scheduled to begin.

The minimum oxygen level operating limit shall be established as the lowest hourly average established during the most recent performance test demonstrating compliance with the CO limit.

b. Where electing to install an oxygen analyzer or oxygen trim system, the following requirements shall be met:

i. the system shall maintain excess air at the desired level in the boiler by providing an automatic feedback signal to the combustion air controller;

ii. the system shall be installed, certified, operated, and maintained in accordance Performance Specification 4, 4A, or 4B of 40 CFR Part 60, Appendix B; and

iii. the system shall be set and operated to maintain the oxygen level at the lowest hourly average oxygen concentration measured during the most recent CO performance test demonstrating compliance, and as the operating limit for oxygen, in accordance with Table 7 to Subpart DDDDD.

(Authority for term: 40 CFR 63.7525(a), 40 CFR 63.7515(i), 40 CFR 63.7530(b)(4),40 CFR 63.7540(a)(8), 40 CFR 63.7510(c), and 40 CFR 63.8)

3. Each tune-up conducted to demonstrate compliance with the requirements of Part 63 Subpart DDDDD shall include the following elements:

a. inspection of the burner(s) (and requirement to clean or replace any necessary components);

b. 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;

c. inspect the air-to-fuel ratio control system to ensure it is correctly calibrated and functioning properly;

d. optimize total emissions of CO, in correlation with any applicable NOx standards, consistent with the manufacturer's specification if applicable;

e. 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 make using a portable CO analyzer);

f. maintain records of the tune-up, inspection, and any corrective actions taken; and

g. 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.

Inspections may be delayed until the next scheduled shutdown; and 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. An initial tune-up must be completed for an existing unit no later than 1/31/16, unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler.

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

4. If using Hg CEMS to demonstrate compliance, the CEMS shall be installed, certified, operated, and maintained in accordance with Performance Specifications 6 and 12A of Part 60, Appendix B and in accordance with the quality assurance procedure 6 of 40 CFR Part 60 Appendix F. If using a sorbent trap based integrated monitor, it shall be installed and operated in accordance with Performance Specification 12B of Part 60 Appendix B. The permittee shall notify the Ohio EPA Central Office of the date the CEMS is to be certified at least 30 days before the performance test. The permittee shall notify the appropriate Ohio EPA District Office or Local Air Agency of the date of CEMS performance evaluations at least 30 days prior to the date the performance evaluation is scheduled to begin. The permittee must notify the appropriate Ohio EPA District Office or Local Air Agency 1 month before starting and 1 month before stopping the use of the Hg CEMS for compliance. Hg CEMS meeting the above and following requirements can be used for compliance with the Hg standard in place of a fuel analysis, annual performance test, and the operating limits specified in Table 4 to Subpart DDDDD:

a. The initial performance evaluation of the Hg CEMS for the existing boiler(s) shall be completed by no later than 7/29/16 or no later than 180 days following the notification to the Director that Hg CEMS will be used for compliance.

b. The permittee shall determine continuous compliance with the Hg standard using CEMS in accordance with to the following procedures:

i. for each day of operation, the hourly average Hg concentration data and stack gas volumetric flow rate data must be measured and recorded;

ii. the Hg CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive minute of operations (Ohio policy), with an average recorded for each 15-minute period;

iii. data from the CEMS (excluding that collected during calibration, quality assurance, or maintenance activities, out-of-control periods, and/or CEMS breakdown) shall be reduced to 1-hour averages, computed from the four 15-minute averages;

iv. the 30-day rolling arithmetic average emission rate (in lb/MMBtu) shall be calculated using the equations in EPA Reference Method 19 at 40 CFR Part 60, Appendix A-7, substituting the Hg concentration for the pollutant concentrations normally used in Method 19;

v. the duration of the performance test must be the maximum of 30 boiler operating days or 720 hours;

vi. at least 2 15-minute data values must be collected during any hour when the CEMS calibration, quality assurance, or maintenance activities are being performed; and

vii. the 1-hour arithmetic averages shall be expressed in lb/MMBtu and shall be used to calculate the boiler 30-day (or 10-day as applicable) rolling average emissions.

(Authority for term: 40 CFR 63.7540(a)(14) and 40 CFR 63.7525(l))

5. If using HCl CEMS to demonstrate compliance, the CEMS shall be installed, certified, operated, and maintained in accordance with Performance Specifications 15 of Part 60, Appendix B and in accordance with the quality assurance procedures of 40 CFR Part 60 Appendix F. The permittee shall notify the Ohio EPA Central Office of the date the CEMS is to be certified at least 30 days before the performance test. The permittee shall notify the appropriate Ohio EPA District Office or Local Air Agency of the date of CEMS performance evaluations at least 30 days prior to the date the performance evaluation is scheduled to begin. The permittee must notify the appropriate Ohio EPA District Office or Local Air Agency 1 month before starting and 1 month before stopping the use of the HCl CEMS for compliance. HCl CEMS meeting the above and following requirements can be used for compliance with the HCl standard in place of a fuel analysis, annual performance test, and the operating limits specified in Table 4 to Subpart DDDDD:

a. The initial performance evaluation of the HCl CEMS for the existing boiler(s) shall be completed by no later than 7/29/16 or no later than 180 days following the notification to the Director that HCl CEMS will be used for compliance.

b. The permittee shall determine continuous compliance with the HCl standard using CEMS in accordance with to the following procedures:

i. for each day of operation, the hourly average HCl concentration data and stack gas volumetric flow rate data must be measured and recorded;

ii. the HCl CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive minute of operations (Ohio policy), with an average recorded for each 15-minute period;

iii. data from the CEMS (excluding that collected during calibration, quality assurance, or maintenance activities, out-of-control periods, and/or CEMS breakdown) shall be reduced to 1-hour averages, computed from the four 15-minute averages;

iv. the 30-day rolling arithmetic average emission rate (in lb/MMBtu) shall be calculated using the equations in EPA Reference Method 19 at 40 CFR Part 60, Appendix A-7, substituting the Hg concentration for the pollutant concentrations normally used in Method 19;

v. the duration of the performance test must be the maximum of 30 boiler operating days or 720 hours;

vi. at least 2 15-minute data values must be collected during any hour when the CEMS calibration, quality assurance, or maintenance activities are being performed; and

vii. the 1-hour arithmetic averages shall be expressed in lb/MMBtu and shall be used to calculate the boiler 30-day (or 10-day as applicable) rolling average emissions.

(Authority for term: 40 CFR 63.7540(a)(15) and 40 CFR 63.7525(l))

6. Each boiler having an annual average heat input greater than 250 MMBtu per hour from solid fossil fuels or heavy liquid fuels must be equipped with either a PM CPMS or PM CEMS if demonstrating compliance with the PM standard instead of TSM. If choosing to install the CPMS, each PM CPMS must be installed, certified, operated, and maintained according to the requirements identified in 40 CFR 63.7525(b)(1) through (4), 40 CFR 63.7530(b)(4)(ii), 40 CFR 63.7540(a)(18), and the site-specific monitoring plan. The permittee shall notify the Ohio EPA Central Office of the date the CPMS is to be certified at least 30 days before the performance test. The permittee shall notify the appropriate Ohio EPA District Office or Local Air Agency of the date of CPMS performance evaluations at least 30 days prior to the date the performance evaluation is scheduled to begin.

The operating principle of the PM CPMS is based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation detection of PM in the exhaust gas. The reportable measurement output from PM CPMS is expressed in milliamps. The PM CPMS must have a cycle time (period required to complete sampling,

measurement, and recording for each measurement) no longer than 60 minutes and must be capable of detecting and responding to PM concentrations of no greater than 0.5 milligram per actual cubic meter. Compliance shall be based on the arithmetic 30-day rolling average PM CPMS output data, recorded in milliamps. The PM CPMS operating limit (in milliamps) shall be established in accordance with 40 CFR 63.7530(b)(4)(ii), as the average PM CPMS output value recorded during the most recent performance test demonstrating compliance with the filterable PM emission limit. The PM CPMS must provide a 4-20 milliamp output and must establish its relationship to the manual reference method measurements (Method 5) in units of milliamps. The Method 5 performance test shall be repeated annually to reassess and adjust the site-specific operating limit for the PM CPMS in accordance with the results of the performance test. An initial performance evaluation for the PM CPMS shall be conducted no later than 7/29/16. Within 48 hours of a deviation from the 30-day rolling PM CPMS average value, the air pollution control device shall be visually inspected and corrective actions taken as soon as possible. Within 30 days of the deviation from the 30-day rolling PM CPMS value, the permittee must conduct or have conducted a PM emissions compliance test to verify or re-establish the CPMS operating limit with Method 5.

(Authority for term: 40 CFR 63.7525(b)(1) through (4), 40 CFR 63.7530(b)(4)(ii), 40 CFR 63.7540(a)(9) and (18), and 40 CFR Part 63, Subpart DDDDD Table 8 #2)

7. Each boiler having an annual average heat input greater than 250 MMBtu per hour from solid fossil fuels or heavy liquid fuels must be equipped with either a PM CPMS or PM CEMS if demonstrating compliance with the PM standard instead of TSM. If choosing to install PM CEMS, each CEMS shall be must be installed, certified, operated, and maintained in accordance with Performance Specification 11 in Appendix B of Part 60 and the site-specific monitoring plan. The permittee shall notify the Ohio EPA Central Office of the date the CEMS is to be certified at least 30 days before the performance test. The permittee shall notify the appropriate Ohio EPA District Office or Local Air Agency of the date of CEMS performance evaluations at least 30 days prior to the date the performance evaluation is scheduled to begin. The PM CEMS output data shall be collected during all non-exempt boiler operating hours and emissions shall be calculated from the arithmetic 30-day rolling average. The reportable measurement output from the PM CEMS shall be expressed in units of the applicable emission limit in Table 2. The following quality assurance procedures and performance tests shall be conducted no later than 7/29/16 for the existing boiler(s) using PM CEMS:

   a. A performance evaluation and certification of the PM CEMS shall be conducted according to the applicable requirements of 40 CFR 60.13, Performance Specification 11 in Appendix B of Part 60 and Procedure 2 in Appendix F of Part 60.

   b. During each PM correlation testing run of the CEMS required by Performance Specification 11 in Appendix B, PM and O2 (or CO2) data shall be collected concurrently (or within a 30- to 60-minute period) by both the CEMS and performance tests conducted using the following test methods:

      i. For PM: Method 5 of 40 CFR Part 60, Appendix A–3 or Method 17 of 40 CFR Part 60, Appendix A–6,

ii. For O2: Method 3A or 3B (as applicable) of 40 CFR Part 60, Appendix A-2

c. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 2 in Appendix F of Part 60.

d. Relative Response Audit's shall be performed annually and

e. Response Correlation Audits shall be performed every 3 years.

(Authority for term: 40 CFR 63.7525(b)(5) through (8) and 40 CFR 63.7540(a)(9) and (19))

8. For boilers equipped with either a wet scrubber or dry sorbent injection system and subject to an HCl emission limit, and where choosing to establish an operating limit based on SO_2 CEMS, the SO_2 CEMS shall be installed, certified, operated, and maintained in accordance with Performance Specification 2 and Part 75 of Title 40, excluding the application of "bias adjustment factors" and "substitute data values" allowed per Part 75. The permittee shall notify the Ohio EPA Central Office of the date the CEMS is to be certified at least 30 days before the performance test. The permittee shall notify the appropriate Ohio EPA District Office or Local Air Agency of the date of CEMS performance evaluations at least 30 days prior to the date the performance evaluation is scheduled to begin. The initial performance evaluation of the SO_2 CEMS for the existing boilers(s) shall be completed by no later than 7/29/16 or no later than 180 days following the notification to the Director that SO_2 CEMS will be used for compliance.

(Authority for term: 40 CFR 63.7525(m), 40 CFR 63.7530(i), and 40 CFR Part 63, Subpart DDDDD Tables 4 #10 and 8 #11)

9. Emission Limitation:

Visible emissions from the exhaust stack serving this emissions unit shall not exceed 10% opacity as a daily block average for dry control systems not required to install and operate PM CEMS, PM CPMS, or a bag leak detection system.

Applicable Compliance Method:

The permittee shall conduct, or have conducted, a performance evaluation of the COMS and the results of the performance evaluation of the COMS shall be submitted to the appropriate offices as specified in 40 CFR 63.8(e)(5)(ii), and 40 CFR 63.10(e)(2)(ii), at least 15 days before the performance tests required under 40 CFR 63.7, 40 CFR 63.7510, and 40 CFR 63.7520. The COMS shall be maintained through daily calibration drift assessments, quarterly performance audits, and annual zero alignment audits Performance evaluations shall be conducted in accordance with 40 CFR 63.8(e) and Performance Specification 1, of Appendix B to Part 60; and COMS data must be reduced in accordance with 40 CFR 63.8(g)(2). The permittee shall notify the Ohio EPA

Central Office of the date the COMS is to be certified at least 30 days before the performance test. The permittee shall notify the appropriate Ohio EPA District Office or Local Air Agency of the date of COMS performance evaluations at least 30 days prior to the date the performance evaluation is scheduled to begin.

(Authority for term: 40 CFR 63.7525(c), 40 CFR 63.8, 40 CFR 63.8(e)(5)(ii), and 40 CFR 63.10(e)(2)(ii),and 40 CFR Part 63, Subpart DDDDD Tables 4 #4a or #6 and 8 #1)

10. As defined in 40 CFR 63.2, Subpart A of Part 63:

Performance audit is defined by the Subpart as: a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

Performance evaluation is defined by the Subpart as: the conduction of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

(Authority for term: 40 CFR 63.2)

11. <u>Emission Limitation</u>:

Chlorine input (Cl entering boiler in lbs/MMBtu); and

Mercury input (Hg entering boiler in lbs/MMBtu); or

Total Selected Metals input (TSM entering boiler in lbs/MMBtu)

<u>Applicable Compliance Method</u>:

For each boiler burning more than one type of fuel, an initial fuel analyses shall be conducted for each type of fuel burned in the boiler in accordance with 40 CFR 63.7521 and Table 6 to the subpart. For solid and liquid fuels an initial fuel analysis must be conducted for Cl and Hg; and for gaseous fuels, not exempted in 40 CFR 63.7510(a)(2)(i) and (ii), an initial fuel analysis must be conducted for Hg. Composited fuel samples shall be prepared during the initial performance test; and solid fuel samples shall be prepared in accordance with 40 CFR 63.7521(c) and (d) or an equivalent method. The resultant fuel analyses shall establish maximum fuel pollutant input levels, in pounds per million Btu, of Cl and Hg, and TSM where opting to comply with the TSM standard. The maximum Cl, Hg, and/or TSM input shall be calculated in accordance with 40 CFR 63.7530(b) using Equations 7 (for Cl), 8 (for Hg), and 9 (for TSM):

a. the maximum Cl fuel input (Cl_{input}) shall be established during the initial performance testing according to the following procedures from 40 CFR 63.7530(b)(1):

   i. the fuel type or fuel mixture that has the highest content of Cl shall be determined from the fuels that are burned or will be burned in the boiler;

   ii. during the performance testing for HCl, the fraction of the total heat input for each fuel type burned (Q_i) shall be determined based on the fuel

mixture that has the highest content of Cl, and the average Cl concentration shall be determined for each fuel type burned (C_i);

iii. a maximum Cl input level shall be established using Equation 7 from 40 CFR 63.7530(b)(1):

$$Cl_{input} = \sum_{i=1}^{n} (C_i)(Q_i)$$

Where:

Cl_{input} = maximum amount of Cl entering the boiler from the fuels burned in pounds per million Btu.

C_i = arithmetic average concentration of Cl in fuel type "i", analyzed according to 40 CFR 63.7521, in pounds per million Btu.

Q_i = fraction of total heat input from fuel type "i", based on the mixture that has the highest content of Cl. If multiple fuel types are not burned during the performance testing, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i.

n = number of different fuel types burned in the boiler for the mixture having the highest content of Cl.

b. the maximum Hg fuel input level (Hg input) shall be established during the initial performance testing according to the following procedures from 40 CFR 63.7530(b)(2):

i. the fuel type or fuel mixture that has the highest content of Hg shall be determined from all the fuels that are burned or that will be burned in the boiler;

ii. during the performance testing for Hg, the fraction of the total heat input for each fuel type burned (Qi) shall be determined based on the mixture that has the highest content of Hg, and the average Hg concentration shall be determined for each fuel type burned (HGi);

iii. a maximum Hg input level shall be established using Equation 8 from 40 CFR 63.7530(b)(2):

$$Hg_{input} = \sum_{i=1}^{n} (HG_i)(Q_i)$$

Where:

Hg_{input} = maximum amount of Hg entering the boiler from the fuels burned, in pounds per million Btu.

HG_i = arithmetic average concentration of Hg in fuel type "i", analyzed according to 40 CFR 63.7521, in pounds per million Btu.

Q_i = fraction of total heat input from fuel type "i", based on the mixture that has the highest Hg content. If multiple fuel types are not burned during the performance testing, it is not necessary to determine the value of this term. Insert a value of ``1'' for Q_i.

n = number of different fuel types burned in the boiler for the mixture having the highest content of Hg.

c. the maximum TSM fuel input level (TSM input) shall be established during the initial performance testing according to the following procedures from 40 CFR 63.7530(b)(3):

i. the fuel type or fuel mixture that has the highest content of TSM shall be determined from all the fuels that are burned or that will be burned in the boiler;

ii. during the performance testing for TSM, the fraction of the total heat input for each fuel type burned (Qi) shall be determined based on the mixture that has the highest content of TSM, and the average TSM concentration shall be determined for each fuel type burned (TSMi);

iii. a maximum TSM input level shall be established using Equation 9 from 40 CFR 63.7530(b)(3):

$$TSM_{input} = \sum_{i=1}^{n} (TSM_i)(Q_i)$$

Where:

TSM_{input} = maximum amount of TSM entering the boiler from the fuels burned, in pounds per million Btu.

TSM_i = arithmetic average concentration of TSM in fuel type "i", analyzed according to 40 CFR 63.7521, in pounds per million Btu.

Q_i = fraction of total heat input from fuel type "i", based on the mixture that has the highest TSM content. If multiple fuel types are not burned during the performance testing, it is not necessary to determine the value of this term. Insert a value of ``1'' for Q_i.

n = number of different fuel types burned in the boiler for the mixture having the highest content of TSM.

(Authority for term: 40 CFR 7510(a)(2), 40 CFR 63.7530(b)(1),(2), and (3), and 40 CFR Part 63, Subpart DDDDD Table 6)

12. Emission Limitation:

For units designed to burn solid fuel (B003 & B004):

Hydrochloric acid (HCl) emissions shall not exceed 2.2E-02 pound per million Btu of heat input.

Mercury (Hg) emissions shall not exceed 5.7E-06 pound per million Btu of heat input.

For units designed to burn liquid fuel (B005):

HCl emissions shall not exceed 1.1E-03 pound per million Btu of heat input.

Hg emissions shall not exceed 2.0E-06 pound per million Btu of heat input.

Applicable Compliance Method:

For each pollutant that the permittee elects to demonstrate compliance through fuel analyses, monthly (or quarterly where meeting the requirements of 40 CFR 63.7515(e)) fuel analyses shall be conducted according to the procedures found in 40 CFR 63.7521, Table 6 to the subpart, and the site-specific fuel analyses plan. Monthly fuel samples shall be collected at a minimum of 14 calendar days from the sample collected for analyses in the previous month. Certified laboratory fuel analyses testing results (which can be submitted by the supplier), demonstrating that sufficient data has been collected to comply with 40 CFR 63.7530(c) for a 90th percentile confidence level of the subject pollutant concentration, shall be used to calculate the subject pollutant's emission rate as required per 40 CFR 63.7530(c). The maximum Cl, Hg, and TSM (if opting to comply with TSM) input shall be calculated (as above) in accordance with 40 CFR 63.7530(b) using Equations 7 (for Cl), 8 (for Hg), and 9 (for TSM); and the HCl, Hg, and TSM emission rates shall be calculated in accordance with 40 CFR 63.7530(c) using Equations 15 (for 90th percentile confidence level pollutant concentration), 16 (for HCl), 17 (for Hg) and 18 (for TSM). The data, calculated to pounds of pollutant per MMBtu per Table 6, shall be reduced to 12-month rolling averages at the end of 12 months. The rolling 12-month average emissions, established through the monthly fuel analyses, shall be maintained at or below the applicable emission limit for HCl, Hg, or TSM as identified in Table 2 to Subpart DDDDD. A fuel analysis must be conducted before burning a new fuel not previously tested. The following procedures and calculations shall be used to demonstrate compliance with an applicable limit through fuel analysis:

a. if burning more than one fuel type, the permittee shall determine the fuel or fuel mixture that would result in the maximum emission rates of each/the pollutant (which could mean multiple fuels);

b. the 90th percentile confidence level, of the pollutant concentration of the composite samples of each fuel type analyzed, shall be determined using the one-sided z-statistic test described in Equation 15 from 40 CFR 63.7530(c)(2) as follows:

$$P_{90} = \text{mean} + (SD \times t)$$

Where:

P_{90} = 90th percentile confidence level pollutant concentration, in pounds per million Btu

mean = arithmetic average of the pollutant concentration in the fuel samples analyzed according to 40 CFR 63.7521, in pounds per million Btu

SD = standard deviation of the pollutant concentration in the fuel samples analyzed according to 40 CFR 63.7521, in pounds per million Btu. SD is calculated as the sample standard deviation divided by the square root of the number of samples.

t = t distribution critical value for 90th percentile ($t_{0.1}$) probability for the appropriate degrees of freedom (number of samples minus one), as obtained from a t-Distribution Critical Value Table

c. in order to demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate for the boiler shall be calculated to be less than the applicable emission limit using Equation 16 from 40 CFR 63.7530(c)(3) as follows:

$$HCl = \sum_{i=1}^{n} [(C_{i90})(Q_i)(1.028)]$$

Where:

HCl = HCl emission rate from the boiler in pounds per million Btu.

C_{i90} = 90th percentile confidence level concentration of Cl in fuel type “i” in pounds per million Btu, as calculated according to Equation 15 above

Q_i = fraction of total heat input from fuel type “i” based on the fuel mixture that has the highest content of Cl. If only one fuel type is used, it is not necessary to determine the value of Q_i and it will equal ”1".

n = number of different fuel types burned in the boiler for the mixture having the highest content of Cl.

1.028 = molecular weight ratio of HCl to Cl

d. in order to demonstrate compliance with the applicable emission limit for Hg, the Hg emission rate for the boiler shall be calculated to be less than the applicable emission limit using Equation 17 from 40 CFR 63.7530(c)(4) as follows:

$$Hg = \sum_{i=1}^{n} [(Hg_{i90})(Q_i)]$$

Where:

Hg = Hg emission rate from the boiler in pounds per million Btu.

Hg_{i90} = 90th percentile confidence level concentration of Hg in fuel type "i" in pounds per million Btu, as calculated according to Equation 15 above.

Q_i = fraction of total heat input from fuel type "i", based on the fuel mixture that has the highest Hg content. If only one fuel type is used, it is not necessary to determine the value of Q_i and it will equal "1".

n = number of different fuel types burned in the boiler for the mixture having the highest content of Hg.

e. in order to demonstrate compliance with the applicable emission limit for TSM, the TSM emission rate for the boiler shall be calculated to be less than the applicable emission limit using Equation 18 from 40 CFR 63.7530(c)(5) as follows:

$$TSM = \sum_{i=1}^{n} [(TSM_{i90})(Q_i)]$$

Where:

TSM = TSM emission rate from the boiler in pounds per million Btu.

TSM_{i90} = 90th percentile confidence level concentration of TSM in fuel type "i" in pounds per million Btu, as calculated according to Equation 15 above.

Q_i = fraction of total heat input from fuel type "i", based on the fuel mixture that has the highest TSM content. If only one fuel type is used, it is not necessary to determine the value of Q_i and it will equal "1".

n = number of different fuel types burned in the boiler for the mixture having the highest content of TSM.

(Authority for term: 40 CFR 63.7505(c), 40 CFR 63.7510(b), 40 CFR 63.7515(e), 40 CFR 63.7530(c), 40 CFR 63.7505(c), and 40 CFR Part 63, Subpart DDDDD Table 6)

13. The permittee shall provide, or have provided, performance testing materials and conditions favorable for stack testing. Air pollution control systems shall be constructed such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and the stack or duct shall be free of cyclonic flow during performance testing. The following conditions shall be provided:

a. sampling ports adequate for the appropriate testing methods;

b. safe sampling platform(s);

c. safe access to sampling platform(s);

d. utilities for sampling and testing equipment; and

e. any other facilities that the Ohio EPA, Division of Air Pollution Control representative deems necessary for safe and adequate testing of each emissions unit.

(Authority for term: 40 CFR 63.7(d))

14. Fuel analyses samples collected in order to demonstrate compliance with 40 CFR Part 63, Subpart DDDDD shall meet the sampling procedures found in 40 CFR 63.7521 and the testing shall be conducted according to the methods and procedures found in Table 6 to the Subpart and the site-specific fuel monitoring plan, for Cl, Hg, or TSM (if choosing to comply with the alternative TSM standard). Monthly records of the types and amounts of each fuel burned in the boiler shall be maintained as required by 40 CFR 63.7540(a). If the fuel supplier is providing the fuel analyses, they must use the methods and procedures found in Table 6 to Part 63 Subpart DDDDD.

(Authority for term: 40 CFR 63.7510(a), 40 CFR 63.7521, 40 CFR 63.7530(c), 40 CFR 63.7540(a)(2), and 40 CFR Part 63, Subpart DDDDD Table 6 and 8)

15. Fuel samples used to meet the fuel sampling analyses requirements shall be collected as follows:

a. When sampling during stack testing, three composite fuel samples shall be collected at one hour intervals during the testing period or fuel samples shall be obtained in accordance to the methods identified in Table 6 to the subpart. For monthly sampling, each composite sample shall be collected at approximately equal 10-day intervals during the month. An automated sampling mechanism shall provide representative composite fuel samples.

b. If sampling from a belt (or screw) feeder, the belt shall be stopped and a 6-inch wide sample shall be collected from the full cross-section of the belt, to obtain a minimum two pounds of sample. Both fines and coarse material shall be included in the full cross- section sample. The samples shall be retained in a clean plastic bag until preparations for testing.

c. If sampling from a fuel pile or truck, for each composite sample, a minimum of five sampling locations shall be selected, uniformly spaced over the surface of the pile. At each sampling site, the sample shall be withdrawn by digging, with a clean shovel, into the pile to a depth of approximately 18 inches. Both fines and coarse material shall be collected in the recovered samples. The samples shall be retained in a clean plastic bag until preparations for testing.

d. Each composite sample shall be prepared according to the procedures:

i. thoroughly mix and pour the entire composite sample over a clean plastic sheet;

ii. break larger pieces (e.g. larger than 3 inches) into smaller sizes;

iii. make a pie shape with the entire composite sample and subdivide it into four equal parts;

iv. separate one of the quarter samples as the first subset;

v. if this subset is too large for grinding, repeat the procedure in paragraph iii above, start over with the quarter sample and obtain a one-quarter subset from this sample;

vi. grind the sample in a mill; and

vii. make a pie shape with the entire composite sample and subdivide it into four equal parts to obtain a one-quarter sub-sample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

The concentration of pollutants in the fuel (Cl, Hg, and/or TSM) shall be determined in pounds per million Btu, for each composite sample for each fuel type and according to the procedures in Table 6 to this Subpart, for use in Equations 7, 8, and 9 of 40 CFR 63.7530(b).

(Authority for term: 40 CFR 63.7521(c), (d), and (e))

4. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, and/or 40 CFR Part 60 or 63:

B006 – 99.64 MMBtu/hr Natural Gas Fired Boiler
B007 – 99.64 MMBtu/hr Natural Gas Fired Boiler

COMPLIANCE REQUIREMENTS – Consent Decree (CD) entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884

5. **Boiler 32 Shutdown.**

a) Byno later than September 30, 2015, the permittee shall permanentlycease Operating Boiler 32. Byno later than October 31,2015, the permittee shall render Boiler 32 physicallyincapable of combustinganyfuel byundertaking all of the following: permanentlyseveringutilities to Boiler 32 bydisconnectingthe electricityto Boiler 32 fans and cuttingandcappingthe feed water supplyto Boiler 32; permanentlydisconnectingsteam linesleading from Boiler 32 tothe Facility's steam distribution system; and permanentlyremovingthe existing four coal feeders toBoiler 32and also weldingsteel plates at each of thefour openings to Boiler 32.

b) Byno later than October 31, 2015, the permitteeshall submit a written request to Ohio EPA to revoke all authorizations to Operate Boiler 32 contained in all OhioEPA Boiler 32 Permits, whichrequest shall state the specific date that Boiler 32ceased Operating. (If the permitteesends the request before September 30, 2015, then the request shall state the date that Boiler 32will cease Operating.) A copyof the request (includingall attachments) sent to Ohio EPA shall simultaneouslybe sent to US EPA byemail.

(Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

6. **Boiler 32Interim Controls**. Until Boiler 32 is permanentlyshut down pursuant to section B.6 above,emissions from Boiler 32 shall be limited as follows:

a) The permittee shall not Operate Boiler 32: (i) for at least 90 contiguous or non-contiguous days between April 1, 2014, and September 30, 2014; nor (ii) for at least 90 contiguous or non-contiguous days between April 1, 2015, and September 30, 2015. Operation during any period of time on any calendar day constitutes a day of Operation for purposes of this section.

b) Incomplyingwithsection B.7.a above, the permittee shall firstoperate, to theextenttechnicallyfeasible,Boiler3,insteadofBoiler1and/orBoiler2,tosupplysteamorchilledwaterduringthedayswhenBoiler32isnot operating.Incomplyingwith section B.7.a above, the permitteeshalloperateBoiler 1 and/orBoiler 2 onlyif Boiler 3 is technicallyincapable ofmeetingsteamor chilledwater demand.Amalfunction of Boiler 3 shallconstitute "technicalincapability" to meet demand.

c) Ifthe permittee complieswith section B.7.b above butnonetheless, dueto aTitleVpermitrestriction on the useof Boiler 1 andBoiler 2, isunableto limit theoperationofBoiler32to93orfewercontiguousornon-contiguousdaysinthe183dayperiod between April 1 andSeptember 30, 2014, orin the183 dayperiodbetween April 1 andSeptember 30, 2015, then nostipulatedpenaltiesunderSubparagraph39.e of the CDshallbedueforupto18daysbetweenApril1andSeptember30,2014, or for up to 18 days between April 1 andSeptember 30, 2015, that the permittee operatesBoiler32when,pursuantto section B.7.a,theyshouldnotOperateBoiler 32

d) The permittee shall use bestefforts to purchaseand use the lowest sulfur coalavailablefromlocalmarketswhenBoiler 32isinoperation. The permitteeshallnotautomaticallyextend anyexistingpurchase ordersor existingcontracts, butratheratthetime the permitteeneedsadditionalcoalforuseattheFacility, the permitteeshall:

1. revise their existingRequest For Proposal ("RFP") to secure the lowestsulfur coal available;

2. issue the RFP on or before April 1, 2014;

3. sendtheRFPtoalllocalcoalsupplierswhichcandelivercoaltotheFacilitybytruck;and

4. provide US EPA with the followinginformation: (a) acopyofthe RFP; (b) the identification of all suppliers ofcoal contacted byDefendants; (c) copies of all bid proposals responsive totheRFP;(d)thesulfurcontentofthecoalavailablefromeachsuchsupplier; (e) acopyofeachpurchaseorderenteredintoidentifyingthedurationandquantityofcoalcontracted

fordeliveryandcoalspecifications,includingata minimum, percent sulfur, percent ash, and heatcontent (BTU/lb); and (f)the rationale for entering into the purchase ordersor contracts with thesuppliers selected. In the quarterlyperiodic reports, the permittee shall provide to US EPA a copyof this record.

(Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

7. **Installation andOperation of One or More Natural Gas-Fired Permanent PackageBoiler(s)**.UnlessbyMay15, 2014, thepermitteeelects to proceed under section B.11 below, thepermitteeand,asapplicable, the permitteeshall complywitheach ofthefollowingrequirements:

a) Thepermitteeshallreplacethe steam-generatingcapacityof Boiler32withoneormorepermanentlyinstalled natural gas-fired package boilers ("Permanent PackageBoiler(s)").

b) Byno later than May30,2014, thepermitteeshall makea final decision about thesize,typeandmanufacturer of the PermanentPackageBoiler(s)andcommunicate thisdecision to US EPA byemail.

c) BynolaterthanMay30,2014,thepermitteeshallsubmitto US EPAbyemailascheduleforthe implementation of the construction, installation, tie-in, startup, and fine-tuningof the Permanent Package Boiler(s).

d) As soon as practicable after decidingthe final size, type,and manufacturerof thePermanentPackageBoiler(s),thepermitteeshallsubmitanapplicationtoOhioEPAfora federally-enforceable permit-to-install the Permanent Package Boiler(s). In theapplication, the Permitteeshall identifythe PermanentPackageBoiler(s) as "(a)newsource(s)"andshallincludeallinformationthatOhioEPArequirestobesubmittedfor new sources. The permitteeshall complywith Prevention of SignificantDeterioration permitting requirements, ifapplicable, and Non-AttainmentNewSourceReview("NonattainmentNSR")permittingrequirements,ifapplicable. IfPSDpermittingrequirementsandNonattainmentNSRpermittingrequirementsarenotapplicable,the permitteeshallemployBestAvailableTechnologyasdefinedatOAC § 3745-31-01(T) on the PermanentPackageBoiler(s).In no event shall theemissionslimitationfor NO_Xon the PermanentPackage Boiler(s) begreater than 0.100 lbs of NO_Xper MMBtuon a30-dayrollingaverage basis. The permitteeshall complywithallapplicable Ohioair permittingrequirements. Nothingin this sectionor the ConsentDecree shallpreclude Ohio EPA fromestablishingamore stringentNO_Xemission limitationand/or a shorter averagingperiod or fromrequiringthe PermanentPackageBoiler(s) to complywith a more stringent NO_Xemissionlimitationand/or a shorteraveragingperiod.

e) The permitteeshall copy US EPA byemail on all written and/or electroniccorrespondence(includingall attachments) with Ohio EPA regardingthe installation and/oroperation of the Permanent PackageBoiler(s)at the same time that anysuchcorrespondence is sent to Ohio EPA.

f) Notificationsto US EPAaboutStatusofInstallationofPermanentPackageBoilersand, if applicable,Properly-PermittedNaturalGas-Fired TemporaryPackageBoiler(s).

1. ByemaildatednolaterthanApril30,2015,thepermitteeshallnotify US EPAaboutwhether ornot thePermitteeshall complete theinstallation andcommence theoperationof PermanentPackage Boiler(s) byno later thanSeptember 30,2015,orrather,whetheritshallcompletetheinstallationandcommencetheoperation ofproperlypermitted,naturalgas-firedTemporaryPackageBoiler(s)bythatdate.Thepermitteeshallsend acopyofthe email to US EPA byregular mailon thesame daytheemailissent.Ifthepermitteeindicates that it shallinstallandcommence operation ofproperlypermitted, natural gas-fired TemporaryPackage Boiler(s) bythatdate, thepermitteeshallinclude the followingin the April 30, 2015 notification:

   a. the size, type,and manufacturer of the TemporaryPackageBoiler(s);

   b. a specific, detailed schedule that includes the timingof the permitting,procurement, and installation of the TemporaryPackageBoiler(s); and

   c. the date the Permanent PackageBoiler(s) is (are) projected to beoperational.

2. If thepermitteenotifies US EPA that it shallinstallandcommence operation ofTemporaryPackageBoilersbySeptember 30, 2015, thepermitteeshall send U S EPAbyemailacopyofthecontract/rentalagreementbetweenthepermitteeandthe lessor/manufacturer as soon asthatcontract isfullyexecuted.

3. A copyof all writtenand/or electroniccorrespondence (including allattachments) with OhioEPA regardingthe installation and/or operation ofTemporaryPackageBoilers shall be sent to US EPA byemail atthe sametimeanysuch correspondenceissent to Ohio EPA.

g) <u>Deadline forInstallationand Readiness for Operation of Either the Permanent PackageBoiler(s) orTemporaryPackageBoiler(s)</u>.Byno later thanSeptember 30, 2015, thepermitteeshall have completed the installation of andmade readyfor operationeitherthe PermanentPackageBoiler(s)orproperlypermitted,naturalgas-fired TemporaryPackageBoiler(s).

h) <u>Deadline for Operation of Either the Permanent Package Boiler(s) or Temporary PackageBoiler(s)</u>.

1. If thepermitteemeets the September 30, 2015 deadline in section B.8.g,then byno later thanSeptember 30, 2015, the permitteeshallcommence operation ofeitherthe PermanentPackageBoiler(s) orproperlypermitted,naturalgas-fired TemporaryPackageBoiler(s),asapplicable.

2. If thepermitteedoes not meetthe September 30, 2015deadline in section B.8.g, then the permitteeshallcommence operation of either thePermanentPackageBoiler(s) orproperlypermitted, naturalgas-firedTemporaryPackageBoiler(s),asapplicable, on the same daythat thepermitteehascompleted the installation of andmade readyfor operationeither thePermanentPackageBoiler(s) orproperlypermitted, naturalgas-firedTemporaryPackageBoiler(s).

i) <u>Final Deadline forInstallation and Readiness forOperation of PermanentPackage Boiler(s) ifTemporaryPackage Boilers areInstalled</u>.Ifthepermitteeinitiallyinstallsproperlypermitted, natural

gas-fired TemporaryPackage Boiler(s), thepermitteeshallcomplete the installation of andmakereadyfor operation the PermanentPackageBoiler(s)byno later thanMay1, 2016.

j) Final Deadline for Operation of Permanent Package Boiler(s) if Temporary Package Boilers are Installed.

1. If the permitteeinitiallyinstallsproperlypermitted,naturalgas-fired TemporaryPackageBoiler(s) and meets the May1, 2016 deadline in section B.8.ifor the installation and operational readiness of the Permanent PackageBoiler(s),the permittee shall commence operation of the Permanent PackageBoiler(s)byno later thanMay1, 2016.

2. If the permitteeinitiallyinstallsproperlypermitted,naturalgas-fired TemporaryPackageBoiler(s) but does not meet the May1,2016 deadline insection B.8.ifor theinstallation and operational readiness of thePermanent Package Boiler(s), the permittee shall commence operation of the Permanent PackageBoiler(s) on the same daythat the permitteehas completedthe installation of and made readyfor operation the Permanent PackageBoiler(s).

k) The permitteeshall not install and permittee shall not Operate the PermanentPackageBoiler(s) without the permitteeinstalling and the permittee's continuouslyoperatingair pollution control equipment that is capable of achievinga NO_Xemission rate of nogreater than 0.100 lb of NO_Xper MMBtu ona 30-dayrollingaverage basis or such other more stringent NO_X emission limitation and/or shorteraveragingperiod that Ohio EPA mayrequire.

l) Compliance Demonstration for the Permanent Package Boiler(s).

1. Ifthe PermanentPackage Boiler(s) is (are)Installedand ReadyforOperationbySeptember30, 2015. If,pursuant tosection B.8.g, thePermanentPackageBoiler(s) is (are) installedandreadyfor operationbySeptember 30, 2015, then byno later thanDecember 31, 2015, the permitteeshalldemonstratecompliancewithallemissionsstandardsapplicabletothePermanentPackageBoiler(s).If OhioEPA requires a demonstration ofcompliance sooner thanDecember 31, 2015, Ohio EPA'searlier date shallapply.

2. If thePermanent Package Boiler(s) is (are)NotInstalledand Readyfor OperationbySeptember30, 2015. Ifthepermitteeinitiallyinstalls properlypermitted,naturalgas-fired TemporaryPackageBoiler(s) and later installsthePermanentPackageBoiler(s),Defendantsshalldemonstratecompliance withallemissionsstandardsapplicable to the PermanentPackageBoiler(s)accordingto thefollowingschedule:

TABLE 1

Dates withinwhich thePermanentPackage Boiler(s) is (are) Installedand Ready for Operation	**Compliance DemonstrationDate**
Oct. 1, 2015–Dec. 31, 2015	Three months after the PermanentPackageBoiler(s) is (are)Installedand ReadyforOperation
Jan. 1, 2016–May1, 2016	June1, 2016
After May1, 2016	One month after the PermanentPackageBoiler(s) is (are)Installedand ReadyforOperation

Provided however, that if Ohio EPA requires a demonstration ofcompliance sooner than the date required byTable1, Ohio EPA's earlierdate shall apply.

m) OngoingComplianceforthe Permanent PackageBoiler(s).

1. Ifthe PermanentPackage Boiler(s) is (are)Installedand ReadyforOperationbySeptember30, 2015. If,pursuant tosection B.8.g, thePermanentPackageBoiler(s) is (are) installedandreadyfor operationbySeptember 30, 2015, then byno later thanDecember 31, 2015, the permitteeshallmaintaincompliance witheach ofthe termsandconditions ofanypermitapplicable to thePermanentPackageBoiler(s) in accordance withthe permittermsandconditions.If OhioEPA requirescompliance soonerthanDecember 31, 2015,OhioEPA'searlier dateshallapply.

2. If the PermanentPackage Boiler(s) is (are)NotInstalledand Readyfor OperationbySeptember 30, 2015.Ifthepermitteeinitiallyinstalls properly permitted,naturalgas-fired TemporaryPackageBoiler(s) and later installsthe PermanentPackageBoiler(s),the permittee shall maintaincompliancewitheach oftheterms and conditions ofanypermit applicable to thePermanentPackageBoiler(s)accordingto the followingschedule:

TABLE 2

Dates withinwhich thePermanentPackage Boiler(s) is (are) Installedand Ready for Operation	Compliance Date
Oct. 1, 2015–Dec. 31, 2015	Three months after the PermanentPackageBoiler(s) is (are)Installedand ReadyforOperation
Jan. 1, 2016–May1, 2016	June1, 2016
After May1, 2016	One month after the PermanentPackageBoiler(s) is (are)Installedand ReadyforOperation

Provided however, that if Ohio EPA requires compliance sooner than thedate required byTable 2,Ohio EPA's earlier dateshall apply.

(Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

8. **TitleV Permitting.** Unless byMay15, 2014, thepermitteeelects to proceed undersection B.11, then priorto the termination of Consent Decree, the permitteeshall submit acomplete application toOhio EPA to modify, amend, or revise the Facility's Title V Permit toincorporate the limits and standards in the federally-enforceable permit secured pursuant tosection B.8.d into the Facility's Title V Permit. A copyof all writtenand/or electroniccorrespondence (includingallattachments)withOhioEPAregardingincorporatingthelimitsandstandards in the federally-enforceable permit secured pursuant to section B.8.d into theFacility's Title V permit shall be sent to US EPA byemail at the same time anysuch correspondence is sent to Ohio EPA. The Consent DecreeshallnotbesubjecttoterminationunlessanduntilaTitleVPermitisissuedandeffectivethatboth:

   a) incorporates the limits and standards in the federally-enforceable permit secured pursuant tosection B.8.d;and

   b) eliminates authorization to OperateBoiler 32.

(Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

9. **Failure of Installation and/or Operation ofeitherPermanent PackageBoiler(s) or TemporaryPackageBoilersbySeptember 30, 2015.**UnlessbyMay15, 2014, thepermitteeelects toproceed under section B.11, thepermittee'sfailure to installandhave readyforoperationeitherPermanentPackageBoiler(s)orproperly-permittedTemporaryPackageBoilersbySeptember 30,2015, orpermittee's failure to commence operation of either PermanentPackage Boiler(s) orproperly-permitted TemporaryPackageBoilersbySeptember 30, 2015, shall not constitute ajustificationforfailingtoshutdownBoiler 32bySeptember 30,2015,oradefensetocompliancewithsection B.6.

(Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

10. **Permittee's Option to Shut Down Boilers 1, 2, 3,and 31 (in addition to Boiler 32).**

a) RequirementsRelatingtoElectingtoPermanentlyCeaseOperatingBoilers1,2,3, and 31 (inaddition to Boiler 32).

1. Byemaildated no laterthan May15, 2014, thepermitteemaynotify US EPA thatthePermitteeintends to permanentlyceaseOperatingBoilers 1, 2, 3, and 31 (inaddition to Boiler 32).The permitteeshallsend a copyofthe email to US EPA byregular mailonthesamedaythe emailissent.

2. In orderto meet the requirement to "permanentlycease Operating"Boilers 1, 2, 3, and 31,the permitteeshallrendereach of these boilersphysicallyincapable ofcombustinganyfuelbyundertakingall ofthefollowingon eachboiler:permanentlyseveringutilities to the boiler bydisconnectingtheelectricityto the boiler fans andcuttingandcappingthe feedwater supplyto theboiler; permanentlydisconnectingsteam linesleadingfromeachboilerto the Facility'ssteam distribution system;andpermanentlyremoving allfuel supplylines.

3. BynolaterthanThirtydaysaftereachboilerpermanentlyceasesOperation,thepermitteeshallsubmitawrittenrequesttoOhioEPAtorevokeallauthorizationsto Operate that boiler contained in all Ohio EPA permits, which requestshall state the specific date that the boiler ceasedOperating. On the samedaythat the permitteesubmits the written request to Ohio EPA, the permitteeshallemail a copyof therequest (includingall attachments) to US EPA.

b) Consequences ofElectingto PermanentlyCeaseOperating Boilers 1, 2, 3,and 31 (inaddition to Boiler 32).Ifthepermitteetimelyprovides US EPA the notice in section B.11.a, then:

1. The permitteeshall permanentlycease Operating Boiler32 on or beforeSeptember 30, 2015, byimplementingall of the requirements ofsection B.6;

2. The permitteeshall implement all of theInterim Controls in the mannerdescribed in section B.7;

3. The permitteeshall not be required to install the Permanent PackageBoilerswhich would otherwise be required bysection B.8.a of this ConsentDecree; The permitteeshall not berequired to meet the otherrequirements ofsections B.8, B.9, or B.10 that are applicable to theinstallation,permitting,andoperatingofthe PermanentPackage Boilers;

4. On and after May15, 2014, the permittee shall not allow anynewcustomerstobeaddedtotheFacility'ssteamand/orchilledwaterdistributionsystem;and

5. To the extent that, as of September 30, 2015, oneor more customers of theFacilityas of theDate ofLodgingstill relyupon the Facilityfor steamand/or chilled water, then, until such time as that customer or thosecustomers no longer areconnected to theFacility's steam/chilled waterdistribution system, the permittee shall provide the customer(s) with steamand/or chilled water through thecontinued Operation of Boilers 1, 2, 3,and/or 31,

and/or throughthe installation and operation of one or moreproperly-permitted Natural Gas-Fired TemporaryPackageBoiler(s). Totheextentthatthe permitteeusesBoilers 1,2,3,and/or31afterSeptember 30,2015, the permittee shall fire Boilers 1, 2, 3, and 31with natural gas only.

c) Notification to US EPA afterAll Boilers in the Facilityare Shut Down. Bynolaterthan 30 days after submittingto Ohio EPA, for thelast boiler within the Facilitythat permanentlyceasesOperating, the written request to Ohio EPA required ineither section B.6.b (if Boiler 32 is the last boiler) or section B.11.a.3 (ifone of the other boilers is last), the permitteeshall provide notice to the United Statesthat all boilerswithin the FacilityhavepermanentlyceasedOperating.

(Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

PROHIBITIONONTHE USE OFCONSENTDECREE EMISSION REDUCTIONS

11. "CD Emission Reductions" shall mean the SO_2, NO_X, and CO emissionsreductions that result from the shutdown of Boiler32, Boiler 32 interim controls, and the Project(s) required bySection VI of the CD.

(Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

12. Prohibition on the Use of CD Emission Reductions.

a) The permittee shall neithergenerate nor use anyCDEmissions Reductions: asnettingreductions (forexample, as creditable, contemporaneousemissionsdecreases under 40 C.F.R. § 52.21(b)(3)(2013));as emissions offsets; to applyfor,obtain, trade, or sell anyemission reduction credits; or in determiningwhether aprojectwouldresultinasignificantemissionsincreaseorsignificantnetemissionsincrease in anyPSD, major non-attainment, and/orminor New Source Reviewpermit or permit proceeding.

b) In thepermittee'sCAA permit applicationfor the PermanentPackage Boiler(s)and inanyother CAA permit that maybe sought involvingtheFacility,baselineactualemissionsduringany24-month periodselected inthe permitapplicationshall notinclude anyemissions from Boiler 32.

c) The permittee shall not applyfor, obtain, trade, or sell anyemission reductioncreditsthat result from CD Emission Reductions.

(Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

13. Outside the Scope of theProhibition. Nothingin the Consent Decree is intendedto preclude the use of CD Emissions Reductionsfrom beingconsidered by US EPA or Ohio EPAascreditablecontemporaneous emission decreases for the purposes ofattainment demonstrationssubmitted pursuant to Section 110 of the Act, 42U.S.C. § 7410, or in determiningimpacts onNational Ambient Air QualityStandards, PSD increment, orair qualityrelated values, includingvisibility, in a ClassIarea.

(Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

PERIODIC REPORTING

14. The permittee shall submit to the UnitedStates aperiodicreportwithin30daysaftertheendofeachcalendarquarter(JanuarythroughMarch;AprilthroughJune; JulythroughSeptember;andOctoberthroughDecember).Thereportshallincludethe followinginformation:

    a) All information necessaryto determine compliance with each of the requirementsof section B.6 (Boiler 32Shutdown), section B.7(Boiler 32Interim Controls,includingthe specific information required in section B.7.c); section B.8(Installation and Operation of One or More Natural Gas-Fired PermanentPackageBoiler(s)); section B.9 (Title V Permitting); andsection B.13(Prohibition on theUse of CD Emissions Reductions);

    b) Adescriptionofanyproblemsanticipatedwithrespecttomeetingtherequirementsof section B.6 (Boiler 32Shutdown), section B.7(Boiler 32InterimControls,includingthe specific informationrequired in section B.7.c); section B.8(Installationand Operation of One orMoreNatural Gas-FiredPermanentPackage Boiler(s)); section B.9 (TitleV Permitting);and section B.13(Prohibition on theUse ofCD EmissionsReductions);

    c) A summaryof actions implemented and expenditures (cumulativeand in thecurrent reportingperiod)made in the course of theimplementation of the Projects.

    (Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

15. Inanyperiodicreport submitted pursuant to thisSection,the permitteemayincorporate byreferenceinformation previouslysubmitted under their Title V permittingrequirements, provided that the permitteeattaches theTitle V Permitreport(orthe pertinentportionsof suchreport) and providea specific reference to the provisions ofthe Title V Permitreportthatare responsiveto the informationrequired in theperiodic report.

    (Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

16. InadditiontothereportsrequiredpursuanttothisSection,ifthe permitteeviolatesordeviatesfromanyprovisionoftheConsentDecree,the permitteeshallsubmitto US EPAareportontheviolation or deviationwithin 15 daysafterthe permitteeknew orshould haveknown oftheevent.In thereport,the permitteeshall explain the cause or causesofthe violation or deviationandanymeasures taken orto betaken bythe permittee to curethe reportedviolationor deviation ortopreventsuchviolationordeviationsinthefuture.When thepermitteeamendstheir TitleV Permit to include the provisions oftheConsentDecree that are required to be included intheir Title V Permit,then the deviationreportsrequired under applicableTitle V regulationsshall be deemed to satisfytherequirements ofthissection.

    (Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

17. Each report shall be signed bythe DirectorofPublic Service for the Permitteeand the President of AES and shall contain the followingcertification:

    This informationwas prepared either by me or under my direction or supervision inaccordance withasystemdesignedtoassurethat qualifiedpersonnelproperlygatherandevaluate the information submitted. Based on my evaluation, or the direction and myinquiry of the person(s)who manage the system,or the person(s)directlyresponsible forgathering the information, I herebycertify

underpenalty of law that, to thebest of myknowledge and belief, this information is true, accurate, and complete. I understand thatthere are significant penalties for submittingfalse, inaccurate, or incomplete informationto the United States.

(Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

18. The reportingrequirements do not relieve the permittee ofanyreportingobligations required bythe CAA orimplementingregulations, or byanyotherfederal, state, or local law, regulation, permit, orother requirement.

    (Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

19. The permittee shall maintain compliance with all terms and provisions of the Consent Decreeentered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884.

    (Authority for term: Consent Decree entered in United States v. City of Akron, et al., Civil Action No. 5:14-cv-00884)

C. Emissions Unit Terms and Conditions

1. B005, Boiler #3

Operations, Property and/or Equipment Description:

Unit #3 - 180 MMBtu/hr Gas/Oil/Used Oil Fired Boiler

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

1. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (16-02187, as effective 03/26/02)	When burning natural gas or No. 2 fuel oil, particulate emissions (PE) shall not exceed 0.020 pound per million Btu of actual heat input. When burning a combination of natural gas, No. 2 fuel oil, and/or on-specification used oil, PE shall not exceed 0.11 pound per million Btu of actual heat input, 19.8 pounds per hour, and 86.72 tons per year. Nitrogen oxides (NOx) emissions shall not exceed 70.3 pounds per hour and 307.9 tons per year. Sulfur dioxide (SO2) emissions shall not exceed 101 pounds per hour. Carbon monoxide (CO) emissions shall not exceed 27.0 pounds per hour and 118.3 tons per year. Organic compound (OC) emissions shall not exceed 42 pounds per hour and 183.96 tons per year. Lead (Pb) emissions shall not exceed 0.0843 pounds per hour and 0.4 ton per

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		year. Visible PE shall not exceed 20% opacity, as a 6-minute average, except during periods of startup, shutdown or malfunction. See c)(2) and c)(3).
b.	OAC rule 3745-31-05(D)	The permittee shall only burn natural gas, No. 2 fuel oil, on-specification used oil or a combination of these fuels in this emissions unit. The permittee shall burn no more than 1,000,000 gallons of on-specification used oil in this emissions unit per rolling, 12-month period. SO2 emissions shall not exceed 48.5 tons per rolling, 12-month period.
c.	OAC rule 3745-17-07(A)	The visible PE limitation specified in this rule is equivalent to the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-10(B)	When burning natural gas and/or No. 2 fuel oil, the PE limitation specified in this rule is equivalent to the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-10(C)	When burning a combination of natural gas, No. 2 fuel oil, on-specification used oil, the PE limitation specified in this rule is less stringent than the PE limitations established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-18-06(D)	When burning No. 2 fuel oil, the sulfur dioxide emission limitation specified in this rule is less stringent than the sulfur dioxide emission limitation established pursuant to OAC rule 3745-31-05(A)(3). When burning natural gas, pursuant to OAC rule 3745-18-06(A), this emissions unit is exempt from the emission limitation specified in this rule.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	40 CFR Part 64	See d)(8) and e)(8) below. Pursuant to 40 CFR 64.2(b), CAM will not apply to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date in that rule of January 31, 2016.
	OAC rule 3745-110-03(J)(4)	The limitation established as BAT pursuant to OAC rule 3745-31-05(A)(3) has been determined to be equivalent to RACT.
	40 CFR Part 63, Subpart DDDDD	Table 2 for existing units: Hydrochloric acid (HCl) emissions shall not exceed 1.1E-03 pound per million Btu of heat input. Filterable particulate matter shall not exceed 6.2E-02 pound per million Btu of heat input. Mercury (Hg) emissions shall not exceed 2.0E-06 pound per million Btu of heat input. Carbon monoxide (CO) emissions shall not exceed 0.13 pound per million Btu of steam output, 3-run average. Boilers subject to emission standards in Table 2 shall also meet the work practice standards identified in Table 3 during startup and shutdown of the unit and the tune-up requirements, as applicable, in Table 3. Visible PE shall not exceed 10% opacity, as a daily block average. See Facility-Wide Section B.4. Applicable requirement after the MACT compliance date of January 31, 2016.
	40 CFR 63.1-15	Table 10 to SubpartDDDDD of 40 CFR Part 63 – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 – 15 apply.

2. Additional Terms and Conditions

   a. 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 opacity monitoring system must be kept on site and available for inspection during regular office hours.

   b. The continuous opacity monitoring system consists of all the equipment used to acquire data and record opacity.

   c. The emissions from this emissions unit shall be vented to the electrostatic precipitator (ESP) at all times the emissions unit is in operation, except when combusting only natural gas.

c) Operational Restrictions

1. All used oil burned in this emissions unit shall be "on-specification used oil" in accordance with the definitions specified in 40 CFR Part 279 and OAC rule 3745-279-11. On-specification used oil shall not be burned during emissions unit start-ups or shutdowns. On-specification used oil shall not be burned until the emissions unit reaches normal operating temperatures.

   All on-specification used oil burned in this emissions unit shall meet the following specifications:

Contaminants/Property	**Allowable Specifications**
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
PCB's	50 ppm, maximum
total halogens	4000 ppm, maximum
mercury	1 ppm, maximum
flash point	100 degrees Fahrenheit, minimum
heat content	100,000 Btu/gallon, minimum
sulfur	0.5%, by weight, maximum

Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under OAC Chapter 3745-279. Therefore, the permittee may receive and burn used oil exceeding 1000 ppm of total halogens (but less than 4000 ppm, maximum) only if the permittee or supplier has demonstrated to the Ohio EPA's Division of Solid and Hazardous Waste Management that the used oil does not contain any hazardous waste.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(A)(3), 40 CFR Part 279 and OAC rule 3745-279-11)

2. In order to avoid applicability of the Prevention of Significant Deterioration rules, the permittee shall restrict the use of fuels burned in this emissions unit in accordance with the following formula:

$$\left(\frac{\text{W gal of No. 2 fuel oil burned}}{\text{rolling, 12} - \text{month period}}\right)\left(\frac{\text{157(S1)lbs. of SO2}}{\text{1,000 gal. of No. 2 fuel oil}}\right)$$
$$+\left(\frac{\text{X gal. of used oil burned}}{\text{rolling 12} - \text{month period}}\right)\left(\frac{\text{157(S2)lbs. of SO2}}{\text{1,000 gal of used oil}}\right)$$
$$+\left(\frac{\text{Z cu. ft natural gas burned}}{\text{rolling, 12} - \text{month period}}\right)\left(\frac{\text{0.6 lb. of SO2}}{\text{10}^{6}\text{ cu. ft of natural gas}}\right)$$
$$\leq\left(\frac{\text{97,000 lbs. of SO2}}{\text{rolling, 12} - \text{month period}}\right)$$

Where:

W is the number of gallons of No. 2 fuel oil burned per rolling, 12-month period;

X is the number of gallons of on - specification used oil burned per rolling, 12-month period;

Z is the cubic feet of natural gas burned per rolling, 12-month period;

S1is the rolling, 12-month weight percent sulfur in the No. 2 fuel oil; and

S2 is the rolling, 12-month weight percent sulfur in the on - specification used oil.

The Btu per pound of wood emission factor is based upon wood with a moisture content equal to or greater than 20%.

Should more accurate SO2 emission factors (in pound per million Btu, pounds per million cubic feet, pounds per thousand gallons,) be developed through emission testing or fuel analyses, the permittee shall use them, provided the new emission factors are mutually agreeable to the Ohio EPA, Akron RAQMD, and the permittee.

(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))

3. The sulfur content of any oil fired in this emissions unit shall not exceed 0.50 weight percent.

   (Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))

4. The permittee shall operate the ESP during any operation, except when combusting only natural gas, of this emissions unit, except the ESP may not be operated during periods of start-up until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP, and when combusting natural gas.

   (Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))

d) Monitoring and/or Recordkeeping Requirements

(1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation and combusting any fuel other than natural gas, shall be no less than 90 percent of the total combined power input, as a 3-hour average, measured during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

(2) The permittee shall properly install, operate, and maintain equipment to monitor and record the following on an hourly basis when the controlled emissions unit(s) is/are in operation,except when combusting only natural gas, including periods of startup and shutdown:

a. the secondary voltage, in kilovolts, and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;

b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kilovolts) by the secondary current (in amps) for each TR set) for each of the fields within the ESP; and

c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).

The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored/calculated values deviate from the minimum limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

d. the date and time the deviation began;

e. the magnitude of the deviation at that time;

f. the date the investigation was conducted;

g. the name(s) of the personnel who conducted the investigation; and

h. 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(s) or at/above the minimum voltage and current limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

i. a description of the corrective action;

j. the date the corrective action was completed;

k. the date and time the deviation ended;

l. the total period of time (in minutes) during which there was a deviation;

m. the secondary voltage and current readings for each field immediately after the corrective action; and

n. 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.

The current minimum power input limit for the ESP is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the minimum power input limit based upon information obtained during future tests that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to these range(s) or minimum voltage and current limit(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

3. The permittee shall maintain monthly records of the following information for this emissions unit:

a. the quantity of No. 2 fuel oil burned, in gallons;

b. the quantity of on-specification used oil burned, in gallons;

c. the quantity of natural gas burned, in cubic feet;

d. the rolling, 12-month summation of each fuel used;

e. the SO2 emissions, in pounds and tons;

f. the rolling, 12-month summation of the SO2 emissions, in tons;

g. the total operating hours for this emissions unit; and

h. the average SO2 emission rate, in pounds per hour (i.e., (f)/(g)).

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

4. The permittee shall receive a chemical analysis with each shipment of on-specification used oil from the supplier. The analysis shall identify the name and address of the supplier, the supplier's USEPA identification number, and the following information:

a. date of shipment or delivery;

b. quantity of used oil received;

c. the Btu value of the used oil;

d. the flash point of the used oil;

e. the arsenic content;

f. the cadmium content;

g. the chromium content;

h. the lead content;

i. the PCB content;

j. the total halogen content;

k. the mercury content; and

l. the sulfur content.

The Director or any authorized representative of the Director may require or may conduct periodic, detailed chemical analyses through an independent laboratory of any used oil shipment received by the facility, of any used oil stored at this facility, or of any used oil sampled at the emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

5. The permittee shall conduct or have performed an analysis of a representative sample of used oil from any used oil storage tank located at the facility on an annual basis. The analysis shall be performed to determine conformance with the contaminant specifications identified in c)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

6. The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

a. 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.

b. 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). 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 <u>Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter</u> and D4294, <u>Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry</u>, or equivalent methods as approved by the Director.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

7. The permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP, except when combusting only natural gas, as follows:

a. during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves 250 degrees Fahrenheit; and

b. during all periods of shutdown until the inlet temperature to the ESP drops below 250 degrees Fahrenheit.

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

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

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

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

   (Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), 40 CFR 60.13, and 40 CFR Part 60, Appendix B)

9. 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:

   c. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;

   d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

   e. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;

   f. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;

   g. 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,

h. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

(Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), 40 CFR 60.13, and 40 CFR Part 60, Appendix B)

10. The CAM plan for this emissions unit has been developed for PE and visible PE. The CAM performance indicator for visible PE is the opacity from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system. The visible PE indicator range is 3 consecutive minutes with an average opacity value less than 20%. When the average opacity value is outside the indicator range, corrective action (including, but not limited to, an evaluation of the emissions unit and ESP operating parameters) will be required. The CAM performance indicators for PE are the visible PE from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system and a predictive PE model based upon the results of site specific particulate emission testing and emissions unit and ESP parametric data collected during the emission testing. The opacity indicator range is an hourly average opacity value less than 20%. When the hourly average opacity value is outside the indicator range, there is no reporting or corrective action requirement relative to the PE limitation, but the operator must enter the current ESP and emissions unit operating parameters into the site specific model to predict the particulate emissions. If the hourly average opacity does not return to a level within the indicated range, the model is run every 3 hours to evaluate emissions. If the results of the predictive model indicate that the PE limitation may have been exceeded, the permittee shall take corrective action to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section e)(7) below. The predictive model shall be run in accordance with the approved CAM Plan or any approved revision of the Plan. Model calibration will be re-verified through periodic emission testing or if the ESP or emissions unit operating conditions change. In addition to periodic monitoring of their ESP operating parameters, the permittee also has an annual inspection and maintenance program for their ESP. Based on the results of the monitoring and inspection program, repairs to the ESP are made per the manufacturer's recommendation. If the current CAM indicators and/or the ESP maintenance program is considered inadequate, the permittee will develop a Quality Improvement Plan.

(Authority for term: OAC rule 3745-77-07((C)(1), 40 CFR Part 64.3(a), 40 CFR Part 64.6(c), 40 CFR Part 64.7(d), and 40 CFR Part 64.8)

e) Reporting Requirements

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

(Authority for term: OAC rule 3745-15-03(A))

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

a. any exceedance of the allowable sulfur dioxide emission limitation, pounds sulfur dioxide/hour;

b. any deviation from the minimum heat content limitation on the oil, Btu/gallon;

c. all exceedances of the rolling, 12-month limitation for on-specification used oil;

d. all exceedances of the rolling, 12-month limitation for SO2;

e. all exceedances of the fuel oil sulfur content restriction;

ESP Requirements

f. all periods of time during start-up and shutdown of the emissions unit when the ESP was not in operation and the temperature of the emissions unit exhaust gases exceeded the temperature levels specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b)(i);

g. for each field of the ESP, each period of time (start time and date, and end time and date) when the field was not operating within the acceptable range(s) or at or above the minimum limit(s) for the secondary voltage and current;

h. 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 ESP;

i. each incident of deviation described in “b” or “c” (above) where a prompt investigation was not conducted;

j. each incident of deviation described in “b” or “c” where prompt corrective action, that would bring the ESP into compliance with the acceptable range(s) or limit(s) for the power input, was determined to be necessary and was not taken; and

k. each incident of deviation described in “c” or “d” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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

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

3. The permittee shall notify the USEPA and the Ohio EPA in writing if on-specification used oil, which exceeds the specifications in c)(1), is burned in this emissions unit. The notification shall include a copy of the on-specification used oil analysis and shall be sent to the USEPA and the Ohio EPA within 30 days of the exceedance.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

4. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of oil which is received for burning in this

emissions unit. The permittee's or oil supplier's analyses shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The total quantity of oil in each shipment and the calculated SO2 emission rate for each shipment of oil shall also be included with the copies of the permittee's or oil supplier's analyses.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the No. 2 fuel oil shipments received during the previous calendar quarters.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

5. The permittee shall submit quarterly reports that specify the total quantity of each fuel combusted in this emissions unit for each calendar month during the calendar quarter. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

   (Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

6. The permittee shall also submit annual reports that specify the total NOx, CO, OC and Pb emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

   (Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

7. 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 District Office or local air agency, 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 if there is an exceedance of the opacity limit

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3) and 40 CFR 60.7)

8. If the results of the predictive model indicate that the particulate emission limitation may have been exceeded, the permittee shall submit the results of the predictive modeling and document any corrective action taken to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall besubmitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(Authority for term: OAC rule 3745-77-07(C)(1),40 CFR Part 64.7(d) and 40 CFR Part 64.9(a))

f) Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of the permit (following the effective date for the Title V permit) (or within 3 months of

the first firing of fuel oil after permit issuance) and within 6 months prior to the permitexpiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PE, NOx, OC, SO2, and CO. The emission testing shall be conducted while the emissions unit is combusting the worst case fuel for each pollutant.

c. The following test methods shall be employed to demonstrate compliance with the following allowable emission limitations:

for PE, Methods 1 through 5 of 40 CFR Part 60, Appendix A;

for NOx, Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A;

for OC, Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A;

for CO, Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A; and

for SO2, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A.

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

e. The emission tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Akron RAQMD.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Akron RAQMD. 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 Akron RAQMD's refusal to accept the results of the emission test(s).

g. Personnel from the Akron RAQMD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

h. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Akron RAQMD 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 Akron RAQMD.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

2. 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:

      When burning a combination of natural gas, No. 2 fuel oil, on-specification used oil, PE shall not exceed 0.11 pound per million Btu of actual heat input, 19.8 pounds per hour, and 86.72 tons per year.

      Applicable Compliance Method:

      Compliance with the pound per million Btu and pounds per hour emission limitations shall be determined through the results of the emission testing requirements specified in Section f)(1).

      The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

   b. Emission Limitation:

      When burning natural gas or No. 2 fuel oil, PE shall not exceed 0.020 pound per million Btu of actual heat input.

      Applicable Compliance Method:

      When burning natural gas, compliance with this emission limitation may be determined by dividing an emission factor of 1.9 pounds of PE (filterable) per million standard cubic feet by the heating value of the natural gas (1020 Btu/standard cu. ft.). This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

      When burning No. 2 fuel oil, compliance may be determined by multiplying an emission factor of 2.0 pounds of PE per thousand gallons of oil fired by the emissions unit's maximum hourly fuel oil firing capacity (1286 gallons/hr at 140,000 Btu/gal) and dividing by the emissions unit's rated heat input capacity (180 MMBtu/hr).

      This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1 (05/10).

      If required, the permittee shall demonstrate compliance with this emission limitation through the results of emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning No. 2 fuel oil.

c. Emission Limitation:

NOx emissions shall not exceed 70.3 pounds per hour and 307.9 tons per year.

Applicable Compliance Method:

Compliance with the pounds per hour emission limitation shall be determined through the results of the emission testing requirements specified in Section f.1.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

d. Emission Limitation:

SO_2 emissions shall not exceed 101 pounds per hour.

Applicable Compliance Method:

The permittee may demonstrate compliance with this emission limitation based upon the records required pursuant to Section d)(3) and through the results of emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning on-specification used oil.

e. Emission Limitations:

CO emissions shall not exceed 27.0 pounds per hour and 118.3 tons per year.

Applicable Compliance Method:

Compliance with the pounds per hour emission limitation shall be determined through the results of the emission testing requirements specified in Section f)(1).

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

f. Emission Limitations:

OC emissions shall not exceed 42 pounds per hour and 183.96 tons per year.

Applicable Compliance Method:

Compliance with the pounds per hour emission limitation shall be determined through the results of the emission testing requirements specified in Section f)(1).

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000.

Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

g. Emission Limitations:

Pb emissions shall not exceed 0.0843 pound per hour and 0.4 ton per year.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be determined by multiplying an emission factor of 55*L pound(s) per thousand gallons of on-specification used oil burned (L= maximum lead content of fuel in wt%) by the emissions unit's maximum hourly on-specification used oil firing capacity (1286 gallons/hr at 140,000 Btu/gal) and applying the ESP emission reduction factor determined during the most recent emission tests that demonstrated the emissions unit was in compliance. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.11, Table 1.11-1 (10/96).

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

If required, the permittee shall demonstrate compliance with this emission limitation through the results of emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 12 or 29.

h. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, except during periods of startup, shutdown or malfunction.

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 the visible PE limitation shall be demonstrated through the results of visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

i. Emission Limitation:

SO2 emissions shall not exceed 48.5 tons per rolling, 12-month period.

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation based upon the records required pursuant to Section d)(3).

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

3. Sulfur dioxide emissions from liquid fuel samples shall be calculated as follows:

$ER = [(1 \times 10^{6}) / H] \times D \times S \times 1.974$

where:

ER = the emission rate in pounds of sulfur dioxide per MMBtu;

H = the heat content of the liquid fuel in Btu per gallon;

D = the density of the liquid fuel in pounds per gallon; and

S = the decimal fraction of sulfur in the liquid fuel.

(Authority for term: OAC rule 3745-18-04(F)(2))

g) Miscellaneous Requirements

1. This emissions unit is no longer capable of combusting solid fuels such as wood due to a change made to the material handling system that serves this emissions unit.

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

2. Emissions Unit Group -Material Handling: F001, F002

EU ID	Operations, Property and/or Equipment Description
F001	Coal Unloading Activities
F002	Wood Unloading Activities

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

1. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)(7)(b)	Visible PE shall not exceed 20% opacity, as a 3-minute average.
b.	OAC rule 3745-17-08(B), (B)(6)	Reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections b)(2)e through b)(2)g.)

2. Additional Terms and Conditions

a. The material unloading stations for barges, railcars, or trucks that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

all material unloading stations at the facility

b. The material conveyors that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

all material conveyors at the facility

c. The material handling operations that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

all material handling operations at the facility

d. The material transfer points that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

all material transfer points at the facility

e. The permittee shall employ reasonably available control measures on all material unloading stations for trucks, material conveyors, material handling operations, and material transfer points for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the coal unloading stations, coal conveyors, coal handling operations, and coal transfer points with suitable dust suppression chemicals at sufficient treatment frequencies and use adequate enclosures to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

f. For each material unloading station, material conveyor, material handling operation, and material transfer point that is not enclosed, such unloading station, conveyor, handling operation or transfer point shall be treated with suitable dust suppression chemicals if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during operation of any coal unloading station, coal conveyor, coal handling, or coal transfer point until further observation confirms that use of the control measures is unnecessary.

g. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

c) Operational Restrictions

1. None.

d) Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section and for coal unloading stations that are not adequately enclosed, the permittee shall perform inspections of such material unloading stations in accordance with the following frequencies:

material unloading station identification: all material unloading stations at the facility

minimum inspection frequency: weekly

(Authority for term: OAC rules 3745-17-08(B) and 3745-77-07(C)(1))

2. Except as otherwise provided in this section and for material conveyors that are not adequately enclosed, the permittee shall perform inspections of such material conveyors in accordance with the following frequencies:

material conveyor identification: all material conveyors at the facility

minimum inspection frequency: weekly

(Authority for term: OAC rules 3745-17-08(B) and 3745-77-07(C)(1))

3. Except as otherwise provided in this section and for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such coal handling operations in accordance with the following frequencies:

   material handling operation identification: all material handling operations at the facility

   minimum inspection frequency: weekly

   (Authority for term: OAC rules 3745-17-08(B) and 3745-77-07(C)(1))

4. Except as otherwise provided in this section and for material transfer points that are not adequately enclosed, the permittee shall perform inspections of such material transfer points in accordance with the following frequencies:

   material transfer point identification: all material transfer points at the facility

   minimum inspection frequency: weekly

   (Authority for term: OAC rules 3745-17-08(B) and 3745-77-07(C)(1))

5. The above-mentioned inspections shall be performed during representative, normal operating conditions.

   (Authority for term: OAC rules 3745-17-08(B) and 3745-77-07(C)(1))

6. The permittee may, upon receipt of written approval from the Akron RAQMD, modify the abovementioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified inspection frequencies would be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

   (Authority for term: OAC rules 3745-17-08(B) and 3745-77-07(C)(1))

7. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed;

   b. the date of each inspection where it was determined by the permittee that it was necessary to

   c. implement the control measures;

   d. the dates the control measures were implemented; and

e. on a calendar quarter basis, the total number of days the control measures were implemented.

The information in d)(7)d. shall be kept separately for (i) the material unloading stations, (ii) the material conveyors, (iii) the material handling operations, and (iv) the material transfer points, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

(Authority for term: OAC rules 3745-17-08(B) and 3745-77-07(C)(1))

e) Reporting Requirements

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

(Authority for term: OAC rule 3745-15-03(A))

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

a. each day during which an inspection was not performed by the required frequency; and

b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

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

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-17-08(B))

f) Testing Requirements

1. Compliance with the emission limitations for material unloading, conveyors, handling operations, and transfer points identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

(Authority for term: OAC rules 3745-77-07(C)(1), 3745-15-04(A), and 3745-17-03(B)(3))

g) Miscellaneous Requirements

1. None.

3. Emissions Unit Group - Wood/TDF/Gas Fired Boilers: B003, B004

EU ID	Operations, Property and/or Equipment Description
B003	Unit #1 - 180 MMBtu/hr Wood/TDF/Gas Fired Boiler
B004	Unit #2 - 180 MMBtu/hr Wood/TDF/Gas Fired Boiler

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

1. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (16-02294, as effective 08/12/08)	When burning natural gas exclusively, particulate emissions (PE) shall not exceed 0.02 lb/MMBtu of actual heat input. When burning a combination of the following fuels: natural gas, TDF and/or wood, PE shall not exceed 0.08 lb/MMBtu of actual heat input, and 14.4 lbs/hr of PE; nitrogen oxides (NO_x) emissions shall not exceed 0.24 lb/MMBtu of actual heat input, and 43.2 lbs/hr; sulfur dioxide (SO_2) emissions shall not exceed 0.28 lb/MMBtu of actual heat input, and 50.4 lbs/hr; carbon monoxide (CO) emissions shall not exceed 18.0 lbs/hr; organic compounds (OC) emissions shall not exceed 0.36 lb/hr and 1.58 tpy of OC; hydrogen chloride (HCl) emissions shall not exceed 0.09 lb/MMBtu, 16.2 lb/hr and

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		19.87 tpy of HCl; sulfuric acid mist emissions shall not exceed 0.053 lb/MMBtu of actual heat input, and 9.56 lbs/hr. Visible PE shall not exceed 20% opacity, as a 6-minute average,(except for one 6-minute period per hour of not more than 27% opacity). See c)(1). Maximum hourly TDF and wood usages shall be limited by the equation found in section c)(2) and a limitation of no more than 3,220 lbs of TDF burned per hour.
b.	OAC rule 3745-17-07(A)	The emissions limitation established by this rule is less stringent than the emissions limitation established by OAC rule 3745-31-05.
c.	OAC rule 3745-17-10(B)	Applicable PE rule when burning natural gas. The emissions limitation established by this rule is less stringent than the emissions limitation established by OAC rule 3745-31-05.
d.	OAC rule 3745-18-06(D)	Applicable SO_2 rule when burning natural gas. The emissions limitation established by this rule is less stringent than the emissions limitation established by OAC rule 3745-31-05.
e.	40 CFR 60, Subpart Db	The emissions limitation established by this rule is equivalent to the emissions limitation established by OAC rule 3745-31-05.
f.	OAC rule 3745-31-(13) thru (20)	The tons of emissions per rolling, 12-month period [for emissions units B003 and B004, combined] shall not exceed the following: SO2 - 135.5 sulfuric acid mist - 23.4.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)a. below.
g.	OAC rule 3745-31-05(D)	This emissions unit is limited to burning natural gas, TDF, and/or wood (as described in c(2)), or a combination of these fuels. The amount of these fuels for emissions units B003 and B004 is limited by the equations found in c)(2) and limitations of no more than 8,655 tons of TDF and no more than 106,818 tons of wood burned per rolling, 12-month period. 36.22 tons of PE/PM10* per Rolling, 12-month period for emissions units B003 and B004, combined. 130.24 tons of NO_x per rolling, 12-month period for emissions units B003 and B004, combined. 56.29 tons of CO per rolling, 12-month period for emissions units B003 and B004, combined. The annual capacity factor for natural gas shall be limited to 10 percent (0.10) or less for this emissions unit per rolling, 12-month period. *All particulate matter less than 10 microns (PM_{10}) is considered to be PE.
h.	40 CFR Part 64	See d)(7) and e)(4) below. Pursuant to 40 CFR 64.2(b), CAM will not apply to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date in that rule of January 31, 2016.
i.	OAC rule 3745-110-03(K)(9) and/or (K)(21)	Exempt. Auxiliary boiler; and/or Utilization of <10% of its capacity factor on an annual basis over a 3-year rolling period, and <20% of its capacity factor in any year of the 3-year rolling period.
j.	40 CFR Part 63, Subpart DDDDD	Table 2 for existing units:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Hydrochloric acid (HCl) emissions shall not exceed 2.2E-02 pound per million Btu of heat input. Filterable particulate matter shall not exceed 3.7E-02 pound per million Btu of heat input. Mercury (Hg) emissions shall not exceed 5.7E-06 pound per million Btu of heat input. Carbon monoxide (CO) emissions shall not exceed 1.4 pound per million Btu of steam output, 3-run average. Boilers subject to emission standards in Table 2 shall also meet the work practice standards identified in Table 3 during startup and shutdown of the unit and the tune-up requirements, as applicable, in Table 3. Visible PE shall not exceed 10% opacity, as a daily block average. See Facility-Wide Section B.4. Applicable requirement after the MACT compliance date of January 31, 2016.
	40 CFR 63.1-15	Table 10 to SubpartDDDDD of 40 CFR Part 63 – Applicability of General Provisions to Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 – 15 apply.

2. Additional Terms and Conditions

a. The permittee performed a Best Available Control Technology (BACT) review for SO_2 and sulfuric acid mist. The emission limitations based on the BACT requirements are listed under OAC rule 3745-31-(13) through(20) above. The following determinations have been made for each pollutant:

SO_2 - Restricting the amount of TDF burned in this emissions unit; and

Sulfuric acid mist - Restricting the amount of TDF burned in this emissions unit.

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 opacity 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 emissions from this emissions unit shall be vented to the electrostatic precipitator (ESP) at all times the emissions unit is in operation, except when combusting only natural gas.

c) Operational Restrictions

1. The permittee shall not burn any oil in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))

2. In order to avoid applicability of the federal Prevention of Significant Deterioration and state OAC 3745-31-13 thru 20 rules for PM/PM-10, NOx, and CO, the permittee shall restrict the use of fuels burned in emissions units B003 through B004, combined, by the following formula*:

$$\left(\frac{\text{X lbs of wood burned}}{\text{rolling 12} - \text{month period}}\right)\left(\frac{\text{0.10 lb of CO}}{10^6\ \text{BTU}}\right)\left(\frac{\text{5500 BTU}}{\text{lb of wood}}\right)$$
$$+\left(\frac{\text{Y lbs of TDF \& } \textit{wood mix burned}}{\text{rolling 12} - \text{month period}}\right)\left(\frac{\text{0.08 lb of CO}}{10^6\ \text{BTU}}\right)\left(\frac{\text{7161 BTU}}{\text{lb of TDF \& } \textit{wood mix}}\right)$$
$$+\left(\frac{\text{Z CF natural gas burned}}{\text{rolling 12} - \text{month period}}\right)\left(\frac{\text{84 lb of CO}}{10^6\text{CF natural gas}}\right)$$
$$\leq \left(\frac{\text{112,580 lbs of CO}}{\text{rolling 12} - \text{month period}}\right)$$

Where:

X is the weight in pounds of pure wood burned per rolling 12-month period,

Y is the weight in pounds of TDF & wood mix burned per rolling 12-month period,

Z is the volume in cubic feet of natural gas burned per rolling 12-month period.

If the rolling, 12-month TDF usage is less than 8,655 tons, the rolling, 12-month wood usage rate is the lesser of 106,818 tons or the amount determined from the following equation:

Tons of wood allowed = 2,463,636 - 276.5 * actual tons of TDF

If the maximum hourly TDF usage is less than 3,220 lbs, the maximum hourly wood usage rate is determined from the following equation:

Pounds of wood allowed = 916,364 - 276.5 * actual lbs of TDF

* note that stack testing and/or fuel analysis required in this permit might change the emission factors used to calculate the above PM, NO_x, and CO lbs value based upon a rolling, 12-month period listed above. Should more accurate emission factors be developed, the permittee shall use them, provided the new emission factors are mutually agreeable to the Ohio EPA, Akron RAQMD, and the permittee.

(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))

3. **Wood Burned Restrictions:**

The permittee shall only burn live tree trimmings and whole, but chipped trees from area land clearing operations. The permittee shall not burn wood or wood waste derived from any manufacturing operations or any other operation which coats, treats, or otherwise contaminates the wood or wood waste.

The permittee shall only burn wet wood that has moisture content of 20% or greater.

(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))

4. **ESP Restrictions:**

The permittee shall operate the ESP during any operation, except when combusting only natural gas, of this emissions unit, except the ESP may not be operated during periods of start-up until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP, and when combusting natural gas.

(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))

5. **Natural Gas Annual Capacity Factor Limitation:**

In order to comply with the NO_xlb/MMBtu limitation listed under OAC rule 3745-31-05(A)(5) in term b)(1), the maximum annual natural gas capacity factor for this emissions unit shall not exceed 10 percent, based upon a rolling, 12-month calculation of the annual capacity factor.

(Authority for term: OAC rule 3745-77-07(A)(1) and 3745-31-05(A)(3))

d) Monitoring and/or Recordkeeping Requirements

1. The permittee shall monitor and record the following information on a daily basis:

   a. the tons of wood that was fed to the boiler that day;

   b. the tons of TDF that was fed to the boiler that day;

   c. the natural gas consumption for each day (in million cubic feet); and

   d. the total actual heat input to the emissions unit, calculated as follows:

$DI = DI_g + DI_w + DI_t$

DI = Total heat input for each day, MMBtu

DI_g = Daily heat input rate from Gas

DI_w = Daily heat input rate from Wood

DI_t = Daily heat input rate from TDF

When the emissions unit is combusting natural gas, use the following equation to calculate heat input rate:

$DI_g = (Q_g * GCV_g)/10^3$

Where:

DI_g = Daily heat input rate from pipeline natural gas, MMBtu/day.

Q_g = Metered flow rate of gaseous fuel combusted during unit operation, thousand standard cubic feet per day.

GCV_g= Gross calorific value of natural gas, as determined by sampling (for each monthly sample of pipeline natural gas, or as verified by the contractual supplier at least once every month pipeline natural gas is combusted) using ASTM D1826-88, ASTM D3588-91, ASTM D4891-89, GPA Standard 2172-86 "Calculation of Gross Heating Value, Relative Density and Compressibility Factor for Natural Gas Mixtures from Compositional Analysis," or GPA Standard 2261-90 "Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography," Btu/scf.

10^3 = Conversion of thousand Btu to MMBtu.

When the unit is combusting wood, use the following equation to calculate heat input rate:

$DI_w = W_w * GCV_w / 10^6$

Where:

DIw = Daily heat input rate from wood, MMBtu/day.

V_w = Weight of wood consumed per day, measured in lbs/day

GCV_w= Gross calorific value of wood = 5,500 Btu/lb, or as measured by ASTM D2015 during most recent stack test, Btu/unit mass, in lbs.

10^6 = Conversion of Btu to MMBtu.

When the unit is combusting TDF, use the following equation to calculate heat input rate:

$DI_t = W_t * GCV_t / 10^6$

Where:

DI_t = Daily heat input rate from TDF, MMBtu/day.

V_t = Weight of TDF consumed per day, measured in lbs/day

GCV_t= Gross calorific value of TDF = 13,000 Btu/lb, or as measured by ASTM E711 during most recent stack test, Btu/unit mass, in lbs.

10^6 = Conversion of Btu to MMBtu.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

Continuous Opacity Monitoring Requirements:

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 District Office or local air agency) upon request.

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

   (Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), 40 CFR 60.13, and 40 CFR Part 60, Appendix B)

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 and the magnitude of manual calibration adjustments;

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).

(Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3), 40 CFR 60.13, and 40 CFR Part 60, Appendix B)

ESP Requirements:

4. The permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the boiler exhaust gases entering the ESP, except when combusting only natural gas as follows:

   a. during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves 250 degrees Fahrenheit; and

   b. during all periods of shutdown until the inlet temperature to the ESP drops below 250 degrees Fahrenheit.

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

   (Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

5. In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation and combusting any fuel other than natural gas, shall be no less than 90 percent of the total combined power input, as a 3-hour average, measured during the most recent emissions test that demonstrated the emissions unit was in compliance with the particulate emission limitation.

   (Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

6. The permittee shall properly install, operate, and maintain equipment to monitor and record the following on an hourly basis when the controlled emissions unit(s) is/are in operation, except when combusting only natural gas, including periods of startup and shutdown:

   a. the secondary voltage, in kilovolts, and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;

   b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kilovolts) by the secondary current (in amps) for each TR set) for each of the fields within the ESP; and

   c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).

   The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

   Whenever the monitored/calculated values deviate from the minimum limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

   d. the date and time the deviation began;

   e. the magnitude of the deviation at that time;

   f. the date the investigation was conducted;

   g. the name(s) of the personnel who conducted the investigation; and

   h. 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(s) or at/above the minimum voltage and current limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

   a. a description of the corrective action;

   b. the date the corrective action was completed;

   c. the date and time the deviation ended;

   d. the total period of time (in minutes) during which there was a deviation;

e. the secondary voltage and current readings for each field immediately after the corrective action; and

f. 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.

The current minimum power input limit for the ESP is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the minimum power input limit based upon information obtained during future tests that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to these range(s) or minimum voltage and current limit(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

CAM Requirements:

7. The CAM plan for this emissions unit has been developed for PE and visible PE. The CAM performance indicator for visible PE is the opacity from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system. The visible PE indicator range is 3 consecutive minutes with an average opacity value less than 20%. When the average opacity value is outside the indicator range, corrective action (including, but not limited to, an evaluation of the emissions unit and ESP operating parameters) will be required. The CAM performance indicators for PE are the visible PE from the ESP exhaust stack as measured and recorded by the certified continuous opacity monitoring system and a predictive PE model based upon the results of site specific particulate emission testing and emissions unit and ESP parametric data collected during the emission testing. The opacity indicator range is an hourly average opacity value less than 20%. When the hourly average opacity value is outside the indicator range, there is no reporting or corrective action requirement relative to the PE limitation, but the operator must enter the current ESP and emissions unit operating parameters into the site specific model to predict the particulate emissions. If the hourly average opacity does not return to a level within the indicated range, the model is run every 3 hours to evaluate emissions. If the results of the predictive model indicate that the PE limitation may have been exceeded, the permittee shall take corrective action to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions and comply with the reporting requirements specified in section e)(7) below. The predictive model shall be run in accordance with the approved CAM Plan or any approved revision of the Plan. Model calibration will be re-verified through periodic emission testing or if the ESP or emissions unit operating conditions change. In addition to periodic monitoring of their ESP operating parameters, the permittee also has an annual inspection and maintenance program for their ESP. Based on the results of the monitoring and inspection program, repairs to the ESP are made per the

manufacturer's recommendation. If the current CAM indicators and/or the ESP maintenance program is considered inadequate, the permittee will develop a Quality Improvement Plan.

(Authority for term: OAC rule 3745-77-07((C)(1), 40 CFR Part 64.3(a), 40 CFR Part 64.6(c), 40 CFR Part 64.7(d), and 40 CFR Part 64.8)

8. The permittee shall maintain monthly records of the following information in emissions units B003 - B004, combined:

   a. the pounds of wood burned;

   b. the pounds of TDF burned;

   c. the cubic feet of natural gas burned;

   d. the rolling, 12-month summation of TDF, natural gas and wood used;

   e. the calculations and the results of the determination that the formulas in term c)(2) were met;

   f. the rolling, 12-month summation of the TDF burned ; and

   g. the rolling, 12-month summation of SO_2 and Sulfuric Acid Mist emission limitations.

   (Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

9. The permittee shall calculate the annual capacity factor as defined in 40 CFR Part 60.41b individually for each fuel burned each calendar quarter pursuant to 40 CFR Part 60.49b.

   The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

   (Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A)(3) and 40 CFR 60.49(b))

10. The permittee shall monitor steam generating unit operating conditions and predict nitrogen oxides emission rates as specified in section g)(1).

    (Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

11. The permittee shall maintain daily records of the following information for each day:

    a. the pounds of TDF burned; and

    b. the pounds of wood burned in conjunction with TDF.

    (Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

12. The permittee shall perform inspections on each shipment of wood delivered to the facility and maintain any necessary records as required the facility's "wood waste inspection plan."

    (Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

13. The permittee shall maintain records of the emission unit's capacity factor on an annual basis and over a 3-year rolling period.

    (Authority for term: OAC rules 3745-77-07(C)(1))

e) Reporting Requirements

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

   (Authority for term: OAC rule 3745-15-03(A))

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

   a. all exceedances of rolling, 12-month limitations for PE/PM10, NOx, CO and maximum allowable usage amount of TDF and/or wood burned;

   b. all exceedances of rolling, 12-month limitations for SO_2 and sulfuric acid mist;

   c. all exceedances of the natural gas annual capacity factor limitation; and

   d. any exceedance of not operating as an auxiliary boiler or utilization exceedance of the capacity factor.

   ESP Requirements

   e. all periods of time during start-up and shutdown of the emissions unit when the ESP was not in operation and the temperature of the emissions unit exhaust gases exceeded the temperature levels specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b)(i);

   f. for each field of the ESP, each period of time (start time and date, and end time and date) when the field was not operating within the acceptable range(s) or at or above the minimum limit(s) for the secondary voltage and current;

   g. 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 ESP;

   h. each incident of deviation described in "e" or "f" (above) where a prompt investigation was not conducted;

i. each incident of deviation described in "e" or "f" where prompt corrective action, that would bring the ESP into compliance with the acceptable range(s) or limit(s) for the power input, was determined to be necessary and was not taken; and

j. each incident of deviation described in "e" or "f" 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.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

3. 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 District Office or local air agency, 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 if there is an exceedance of the opacity limit

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3) and 40 CFR 60.7)

4. If the results of the predictive model indicate that the particulate emission limitation may have been exceeded, the permittee shall submit the results of the predictive modeling and document any corrective action taken to restore operation of the emissions unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall besubmitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(Authority for term: OAC rule 3745-77-07(C)(1),40 CFR Part 64.7(d) and 40 CFR Part 64.9(a))

5. The permittee shall submit quarterly reports which specify the total quantity of each fuel combusted in this emissions unit for each calendar month during the calendar quarter. These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

6. The permittee shall submit excess emission reports for any calculated exceedance of the NOx emission limitation. All reports shall be submitted by the 30th day following the end of the 6 month reporting period.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

f) Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after issuance of the permit (following the effective date for the Title V permit) (or within 3 months of

first firing of either wood, TDF, or a combination of wood and TDF after permit issuance) and within 6 months prior to the permitexpiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates, nitrogen oxides, SO2, carbon monoxide, organic compounds, hydrogen chloride and sulfuric acid mist.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

for PE, Methods 1-5 of 40 CFR Part 60, Appendix A (while firing TDF and wood mix);

for NO_x, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A (while firing only wood);

for SO_2, Methods 1-4 and 6C of 40 CFR Part 60, Appendix A (while firing TDF and wood mix);

for CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A (while firing only wood);

for OC, Methods 1-4 and 25A of 40 CFR Part 60, Appendix A (while firing TDF and wood mix);

forHCl, Methods 1-4 and 26 of 40 CFR Part 60, Appendix A (while firing TDF and wood mix); and

for H_2SO_4 mist, Methods 1-4 and 8 of 40 CFR Part 60, Appendix A (while firing TDF and wood mix).

If only a single fuel is combusted in the emissions unit, then all pollutants shall be tested for each fuel.

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

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

2. 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:

0.02 lb of PE/MMBtu of actual heat input, when combusting only natural gas

Applicable Compliance Method:

The AP-42 [(7/98) Table 1.4-2] emission factor for natural gas combustion is 1.9 lbs of PE per (filterable) 10^6scf. This factor is based on an average natural gas heating value of 1,020 Btu/scf and is equivalent to 0.007451 lb of PE per MMBtu.

The permittee shall demonstrate compliance with the PE limitation above based on the results of emission testing conducted in accordance with Methods 1 – 5 of 40 CFR, Part 60, Appendix A.

b. Emission Limitations:

0.08 lb of PE/MMBtu of actual heat input

14.4 lbs/hr of PE

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PE limitation above based on the results of emission testing conducted in accordance with Methods 1 – 5 of 40 CFR, Part 60, Appendix A.

c. Emission Limitations:

0.24 lb of NO_x/MMBtu of actual heat input

43.2 lbs/hr of NO_x

Applicable Compliance Method:

The permittee shall demonstrate compliance with the NOx emission limitations above based on the results of emission testing conducted in accordance with Methods 1-4 and 7E, 40 CFR Part 60, Appendix A.

d. Emission Limitations:

0.28 lb of SO_2 / MMBtu of actual heat input

50.4 lbs/hr of SO_2

Applicable Compliance Method:

The permittee shall demonstrate compliance with the SO2 emission limitation based on the results of emission testing conducted in accordance with Methods 1-4 and 6C, 40 CFR Part 60, Appendix A.

e. Emission Limitation:

18.0 lbs/hr of CO

Applicable Compliance Method:

The permittee shall demonstrate compliance with the CO limitation based on the results of emission testing conducted in accordance with Methods 1-4 and 10, 40 CFR Part 60, Appendix A.

f. Emission Limitations:

0.36 lbs/hr of OC

1.58 tpy of OC

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly OC emission limitation based on the results of emission testing conducted in accordance with Methods 1-4 and 25A, 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly mass emission limitation by 8760 hours per year, and then dividing by 2000. Therefore, compliance with the annual limitation shall be demonstrated if compliance with the hourly limitation is maintained.

g. Emission Limitations:

0.09 lbHCl/MMBtu

16.2 lbs/hr of HCl

19.87 tpy of HCl

Applicable Compliance Method:

The permittee shall demonstrate compliance with the HCl limitations above based on the results of emission testing conducted in accordance with Methods 1-4 and 26, 40 CFR Part 60, Appendix A.

To demonstrate compliance with the annual emission limitation, multiply the result of most recent stack test, in pounds/MMBtu, by the rated boiler capacity of 180 MMBtu/hr, by the maximum operating hours of 8760 hours/year and divide by 2000 to convert the result to tons.

h. Emission Limitations:

0.053 lb of sulfuric acid mist/MMBtu

9.56 lbs/hr of sulfuric acid mist

Applicable Compliance Method:

The permittee shall demonstrate compliance with the sulfuric acid mist limitation based on the results of emission testing conducted in accordance with Methods 1-4 and 8, 40 CFR Part 60, Appendix A.

i. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, (except for one 6-minute period per hour of not more than 27% opacity)

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 the visible emission limitation shall be demonstrated by the results of testing in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures in OAC rule 3745-17-03(B)(1).

j. Emission Limitation:

135.5 tons per rolling, 12-month period of SO2 from B003 and B004, combined

Applicable Compliance Method:

Annual SO2 emissions = SO2 emissions from TDF + SO2 emissions from wood

SO2 emissions from TDF = tons of TDF burned * 26 MMBtu/ton * 1.17 lb/MMBtu * 1 ton/2,000 lbs

SO2 emissions from wood = tons of wood burned * 11 MMBtu/ton * 0.01 lb/MMBtu * 1 tons/2,000 lbs

The MMBtu heat content and emission rates in lb/MMBtu in the above equations should be adjusted if data obtained during emission testing warrants a change.

k. Emission Limitation:

23.4 tons per rolling, 12-month period of sulfuric acid mist from B003 and B004 combined

Applicable Compliance Method:

The permittee shall demonstrate compliance with the limitation above by multiplying the result of the most recent stack test, in pounds/MMBtu, by the rated boiler capacity of 180MMBtu/hr, by the maximum operating hours of 8760 hours/year, and dividing by 2000 lbs/ton.

l. Emission Limitations:

36.22 tpy of PM for emissions units B003 and B004, combined

130.24 tpy of NO_x for emissions units B003 and B004, combined

56.29 tpy of CO for emissions units B003 and B004, combined

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitations based upon the record keeping requirements in section c)(5) of these T&Cs.

m. Emission Limitation:

Annual capacity factor for natural gas shall be limited to 10 percent (0.10)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the record keeping requirements of section d)(9) of these T&Cs.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))

g) Miscellaneous Requirements

1. The permittee shall maintain a plan that identifies the operating conditions to be monitored to demonstrate compliance with the nitrogen oxides emission limitations. The plan shall:

a. identify the specific operating conditions to be monitored and the relationship between these operating conditions and nitrogen oxides emission rates (i.e., ng/J or lbs/million Btu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas oxygen level);

b. include the data and information that the owner or operator used to identify the relationship between nitrogen oxides emission rates and these operating conditions; and

c. identify how these operating conditions, including steam generating unit load, will be monitored on an hourly basis by the permittee during the period of operating of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the permittee.

(Authority for term: OAC rule 3745-77-07(C)(1) and 3745-31-05(A)(3))