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

6/2/2014

Certified Mail

Facility ID: 0285010188
Permit Number: P0107692
County: Wayne

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

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is a finalOhio Environmental Protection Agency (EPA) Air Pollution Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

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

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northeast District Office as indicated on page one of your permit.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA DAPC, Northeast District Office

FINAL

Division of Air Pollution Control
Title V Permit
for
Department of Public Utilities, City of Orrville, Ohio

Facility ID:	0285010188
Permit Number:	P0107692
Permit Type:	Renewal
Issued:	6/2/2014
Effective:	6/23/2014
Expiration:	6/23/2019

Division of Air Pollution Control
Title V Permit
for
Department of Public Utilities, City of Orrville, Ohio

Table of Contents

Authorization 1

A. Standard Terms and Conditions 2

1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements 3
3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance 6
4. Risk Management Plans 7
5. Title IV Provisions 7
6. Severability Clause 7
7. General Requirements 7
8. Fees 8
9. Marketable Permit Programs 8
10. Reasonably Anticipated Operating Scenarios 9
11. Reopening for Cause 9
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 11
15. Operational Flexibility 11
16. Emergencies 12
17. Off-Permit Changes 12
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels 13
20. Permit to Install Requirement 13
21. Air Pollution Nuisance 13
22. Permanent Shutdown of an Emissions Unit 13
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 14
25. Records Retention Requirements Under State Law Only 14
26. Inspections and Information Requests 14
27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements 15
28. Permit Transfers 15

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 15
30. Submitting Documents Required by this Permit 16
B. Facility-Wide Terms and Conditions 17
C. Emissions Unit Terms and Conditions 20
1. F001, Paved and Unpaved Roadways 21
2. F004, Fly Ash and Bottom Ash Handling 23
3. Emissions Unit Group -Pulverized Coal Boilers: B001 and B004 25
4. Emissions Unit Group -Stoker Coal Boilers: B005 and B006 89

Authorization

Facility ID:	0285010188
Facility Description:	Municipal Utility Electric Generation Plant
Application Number(s):	A0040622
Permit Number:	P0107692
Permit Description:	Renewal of Title V Permit for municipal electric generating station.
Permit Type:	Renewal
Issue Date:	6/2/2014
Effective Date:	6/23/2014
Expiration Date:	6/23/2019
Superseded Permit Number:	P0086435

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

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

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

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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 Ohio EPA DAPC, Northeast District Office. 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 Ohio EPA DAPC, Northeast District Office. 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 Ohio EPA DAPC, Northeast District Office 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 Ohio EPA DAPC, Northeast District Office 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 Ohio EPA DAPC, Northeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

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

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

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 Ohio EPA DAPC, Northeast District Office) 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 Ohio EPA DAPC, Northeast District Office 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 Ohio EPA DAPC, Northeast District Office 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 theOhio EPA DAPC, Northeast District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (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 Ohio EPA DAPC, Northeast District Office. 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 Ohio EPA DAPC, Northeast District Office 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 Ohio EPA DAPC, Northeast District Office 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 Ohio EPA DAPC, Northeast District Office, 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.

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 the compliance date specified in 40 CFR 63.7495, unless a compliance extension is granted pursuant to Clean Air Act § 112(i).

   The following emissions units in this permit are subject to the aforementioned requirements: B001, B004, B005, and B006.

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

   a) The terms in this permit identify the applicable requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) contained in 40 CFR Part 63, Subpart DDDDD. The requirements of this subpart apply to the facility's boilers and process heaters according to their applicable subcategory, as identified in 40 CFR 63.7499 and as defined in 40 CFR 63.7575. The terms of this permit restate the requirements of 40 CFR Part 63, Subpart DDDDD and are not intended to make these requirements more stringent or provide less flexibility than the existing federal requirements.

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

   b) Boilers designed to only burn gas 1 fuels (subcategory) are not subject to the emission limits in Table 2 of the subpart or the operating limits in Table 4 to the subpart. However, the boilers are subject to tune-up requirements, conducted in accordance with 40 CFR 63.7540(a)(10)(i) through (vi) and Table 3 to the subpart; and the existing boilers must be included in the one-time energy assessment, performed in accordance with Table 3 #4 of the subpart.

      [Authority for term: 40 CFR 63.7500(e) and 40 CFR 63.7540(a)(10) through (13)]

   c) Boilers identified as limited-use boilers are not subject to the emission limits in Table 2 of the subpart, the operating limits in Table 4 of the subpart, or the energy assessment requirements in Table 3 of the subpart. However, the limited-use boiler(s) are subject to 5-year tune-up requirements, conducted in accordance with 40 CFR 63.7540(a)(10)(i) through (vi) and Table 3 to the subpart.

   d) Each limited-use boiler shall have a federally enforceable average annual capacity factor of no more than 10%.

      [Authority for term: 40 CFR 63.7500(c) and 40 CFR 63.7540(a)(10) (12), and (13)]

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.

3. The Ohio EPA has approved the Compliance Assurance Monitoring (CAM) plan submitted by the permittee, pursuant to 40 CFR Part 64, for emissions units B001, B004, B005 and B006. The permittee shall comply with the provisions of the plan (as specified in Part C - Terms and Conditions for Emissions Units) during any operation of the aforementioned emissions units.

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

C. Emissions Unit Terms and Conditions

1. F001, Paved and Unpaved Roadways

Operations, Property and/or Equipment Description:

Paved and Unpaved Roadways

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 3745-17-08(B)	See b)(2)a.
b.	OAC rule 3745-17-07(B)	See b)(2)b.

(2) Additional Terms and Conditions

a. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

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

a. None.

g) Miscellaneous Requirements

(1) None.

2. F004, Fly Ash and Bottom Ash Handling

Operations, Property and/or Equipment Description:

Fly Ash and Bottom Ash Handling & Loadout.

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 3745-17-08(B)	See b)(2)a.
b.	OAC rule 3745-17-07(B)	See b)(2)b.

(2) Additional Terms and Conditions

a. The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

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

a. None.

g) Miscellaneous Requirements

(1) None.

3. Emissions Unit Group -Pulverized Coal Boilers: B001 and B004

EU ID	Operations, Property and/or Equipment Description
B001	315.6 MMBtu/hr Pulverized Coal-Fired Boiler No. 12
B004	365.4 MMBtu/hr Pulverized Coal-Fired Boiler No. 13

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR Part 63, Subpart DDDDD, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters. (applicability 40 CFR 63.7485; affected source, 40 CFR 63.7490)	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 as identified in Table 2 for existing units:* **1. For units combusting at least 10% coal and < 10% biomass on an annual heat input basis:** <u>PM</u>† 0.040 lb of filterable particulate matter (PM)/MMBtu of heat input; or 5.3 E-05 lb of Total Selected Metals (TSM)/MMBtu of heat input; or 0.042 lb filterable PM/MMBtu of steam output; or 0.49 lb filterable PM/MWh; or 5.6E -05 lb TSM/ MMBtu of steam output; or 6.5E -04 lb TSM/MWh; and <u>HCl</u>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.022 lb of hydrogen chloride (HCl)/MMBtu of heat input; or 0.025 lb HCl/MMBtu of steam output; or 0.27 lb HCl/MWh; and <u>Hg</u> 5.7 E -06 lb of mercury (Hg)/MMBtu of heat input; or 6.4E -06 lb Hg/MMBtu of steam output; or 7.3E -05 lb Hg/MWh; and <u>CO</u> 130 ppm carbon monoxide (CO) by volume on a dry basis, corrected to 3% O_2, 3-run average; or 0.11 lb CO/MMBtu of steam output, 3-run average; or 1.4 lb CO/MWh, 3-run average; or 320 ppm CO by volume on a dry basis, corrected to 3% O_2, as a 30-day rolling average, if using CEMS. **2. For units combusting at least 10% biomass on an annual heat input basis:** <u>PM</u> 0.051 lb of filterable PM/MMBtu of heat input; or 6.5 E -03 lb of TSM/MMBtu of heat input; or 0.052 lb filterable PM/MMBtu of steam output; or 0.71 lb filterable PM/MWh; or 6.6E -03 lb TSM/ MMBtu of steam output; or 9.1E -02 lb TSM/MWh; and <u>HCl</u>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.022 lb of HCl/MMBtu of heat input; or 0.025 lb HCl/MMBtu of steam output; or 0.27 lb HCl/MWh; and <u>Hg</u> 5.7 E -06 lb of Hg/MMBtu of heat input; or 6.4E -06 lb Hg/MMBtu of steam output; or 7.3E -05 lb Hg/MWh; and <u>CO</u> 2400 ppm CO by volume on a dry basis, corrected to 3% O_2, 3-run average; or 1.9 lb CO/MMBtu of steam output, 3-run average; or 27 lb CO/MWh, 3-run average; or 2000 ppm CO by volume on a dry basis, corrected to 3% O_2, as a 10-day rolling average, if using CEMS. Boilers combusting only Gas 1 fuels (except as allowed by rule) and limited-use boilers, as those terms are defined in 40 CFR 63.7575,are not subject to emission standards in Subpart DDDDD.
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. The visible emissions limitation specified in this rule is less stringent than the visible emissions limitation established pursuant to 40 CFR Part 63, Subpart DDDDD, Table 4, Line #4.
c.	OAC rule 3745-17-10(C)	Particulate emissions shall not exceed 0.17 lb/MMBtu of actual heat input. The PM emission limitation specified by this rule is less stringent than the PM limitation established pursuant to 40 CFR Part 63, Subpart DDDDD.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-18-91(E)	Sulfur dioxide emissions shall not exceed 7.0 lbs/MMBtu of actual heat input.
e.	40 CFR Part 64, Compliance Assurance Monitoring (CAM) Rule	See d)(3). 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.
f.	OAC rule 3745-110-03	The requirements of the NO_x RACT rule are not applicable to this source as it is located in Wayne County, which is not one of the counties listed in OAC rule 3745-110-02(A)(1).

*The emission limits contained in this permit assume that the permittee will combust only coal, dry biomass, and Gas 1 fuels. If the permittee combusts any other fuels in these units that causes the boiler(s) to become subject to a different subcategory, the permittee shall comply with the applicable emission limits for the new subcategory instead of the emission limits presented in the table above.

† These emission limits are based on a 30-day rolling average if the boiler has an annual average heat input rate > 250 MMBtu/hr from coal/solid fossil fuel, and must install either PM CPMS or PM CEMS, per 40 CFR 63.7525(b).

(2) Additional Terms and Conditions

a. At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

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

b. Except for existing units demonstrating compliance through emissions averaging (40 CFR 63.7522), each existing boiler subject to 40 CFR Part 63, Subpart DDDDD shall meet each applicable emission limit in Table 2; and all existing 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 specified in 40 CFR 63.7495.

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

c. 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 180 days after the compliance date specified in 40 CFR 63.7495, or no later than 180 days after re-start of a boiler that was not operated between the

effective date of Part 63 Subpart DDDDD and the compliance date, or that has not operated for over a year following the last compliance demonstration.

[Authority for term: 40 CFR 63.7510(e) and (j), 40 CFR 63.7515(g), 40 CFR 63.7495(b), and 40 CFR 63.7(a)(2)]

d. For each existing boiler other than limited use units, a one-time energy assessment must be performed by a qualified energy assessor no later than the compliance date specified in 40 CFR 63.7495. The one-time energy assessment for existing units must include the following, but need not exceed the number of technical hours provided for the energy assessment in 40 CFR 63.7575:

i. a visual inspection of the boiler system;

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

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

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

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

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

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

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

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

e. An initial tune-up must be completed for existing units no later than the compliance date specified in 40 CFR 63.7495, unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable annual, biennial, or 5-year schedule as specified in 40 CFR 63.7500(a)-(e), 40 CFR 63.7540(a)(10) through (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent annual tune-up must occur no more than 13 months after the previous tune-up; each biennial tune-up must be conducted no more than 25 months after the previous tune-up; and each

5-year tune-up must be completed no more than 61 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler. Units that produce electricity for sale may delay the inspection until the first outage, but may not exceed 36 months from the previous inspection. The frequency of tune-ups shall be based on the frequency identified in Table 3 to the subpart.

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

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

ii. inspection of the flame pattern and requirement to adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications if applicable;

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

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

v. measure the concentration of CO (in ppm, by volume) and oxygen (in volume percent) in the effluent gas stream, at the high-fire or typical operating load, and both before and after any adjustments (measurements can be make using a portable CO analyzer);

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

vii. where more than one type of fuel is used, records of the type and amount of each fuel type burned over the 12 months prior to the tune-up.

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

f. 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 40 CFR 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).

[Authority for term: 40 CFR 63.7505(a), (c), 40 CFR 63.7500(f), and 40 CFR 63.7540(d)]

g. 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 (including the use of equivalent methods as defined in 40 CFR 63.7575). For gaseous fuels, fuel analysis cannot be used for compliance with the HCl or TSM standards.

[Authority for term: 40 CFR 63.7505(c) and 40 CFR Part 63, Subpart DDDDD Table 6]

h. 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.

[Authority for term: 40 CFR 63.7540(a)(1)]

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

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

c) Operational Restrictions

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

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

(2) For boilers demonstrating compliance using a BLDS, the alarm may not sound more than 5% of the operating time during each 6-month period. Corrective action(s) must be initiated within 1 hour of an alarm and completed as soon as practicable.

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

(3) For boilers demonstrating compliance using a PM CPMS, you must establish the PM CPMS operating limit 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 or at the PM CPMS output value corresponding to 75 percent of the emission limit if your PM performance test demonstrates compliance below 75 percent of the emission limit. Compliance shall be based on the arithmetic 30-day rolling average of all the hourly average quality-assured

PM CPMS output data, recorded in milliamps, collected during all boiler operating hours and updated at the end of each new boiler operating hour. The 30-day average shall be calculated using Equation 14 of Subpart DDDDD of Part 63. The Method 5 performance test shall be repeated during each required performance test to reassess and adjust the site-specific operating limit for the PM CPMS in accordance with the results of the performance test.

For any deviation of the 30-day rolling PM CPMS average value from the established operating parameter limit, you must:

a. Within 48 hours of the deviation, visually inspect the air pollution control device (APCD);

b. If inspection of the APCD identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and

c. Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph.

PM CPMS deviations from the operating limit leading to more than four required performance tests in a 12-month operating period constitute a separate deviation.

[Authority for term: 40 CFR 63.7515(b), 40 CFR 63.7530(b)(4)(ii), 40 CFR 63.7540(a)(18), and 40 CFR Part 63, Subpart DDDDD Table 8 #2]

(4) For boilers demonstrating compliance with PM limits using a wet scrubber, you must 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 the lowest one-hour average liquid flow rate, respectively, measured during the most recent performance test demonstrating compliance with the PM emission limitation according to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD of Part 63.

[Authority for term: 40 CFR 63.7530(b), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 4 #1, 7 #1, and 8 #4]

(5) For boilers demonstrating compliance with the HCl limit using a wet acid gas scrubber, you must maintain the 30-day rolling average effluent pH at or above the lowest one-hour average pH and the 30-day rolling average liquid flow rate at or above the lowest one-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with the HCl emission limitation according to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD of Part 63. If you use a wet scrubber and you conduct separate performance tests for HCl and mercury emissions, you must establish one set of minimum scrubber effluent pH and liquid flow rate operating limits.

The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flow rate operating limit at the higher of the minimum values established during the performance tests.

[Authority for term: 40 CFR 63.7530(b), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 4 #2, 7 #2, and 8 #4-#5]

(6) For boilers demonstrating compliance with an electrostatic precipitator (ESP) operating with a wet scrubber and not using a PM CPMS or PM CEMS, you must maintain the 30-day rolling average total secondary electric power input of the ESP at or above the operating limits established during the three-run performance test demonstrating compliance according to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD of Part 63.

[Authority for term: 40 CFR 63.7530(b), and 40 CFR Part 63, Subpart DDDDD, Table 4 #4, 7 #1, and 8 #7]

(7) For boilers demonstrating compliance using a dry control electrostatic precipitator (ESP) that are not using a PM CPMS or PM CEMS to demonstrate compliance, the opacity shall be maintained at less than or equal to 10% as a daily block average.

[Authority for term: 40 CFR 63.7530(b), and 40 CFR Part 63, Subpart DDDDD, Table 4 #4 and 8 #1]

(8) For boilers demonstrating compliance with the HCl emission limits using a dry scrubber, you must maintain the 30-day rolling average sorbent injection rate at or above the lowest one-hour average injection rate measured during the three-run performance test demonstrating compliance with the HCl emission limitation according to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD of 40 CFR Part 63. When the unit operates at lower loads, the sorbent injection rate shall be multiplied by the load fraction to determine the required injection rate. If different acid gas sorbents are used during the HCl performance test, the average value for each sorbent becomes the site-specific operating limit for that sorbent.

[Authority for term: 40 CFR 63.7530(b), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 4 #5, 7 #2, and 8 #6]

(9) For boilers demonstrating compliance with the Hg emission limits using activated carbon injection, you must maintain the 30-day rolling average carbon injection rate at or above the lowest one-hour average injection rate measured during the three-run performance test demonstrating compliance with the Hg emission limitation according to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD of Part 63. When the unit operates at lower loads, the carbon injection rate shall be multiplied by the load fraction to determine the required injection rate.

[Authority for term: 40 CFR 63.7530(b), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 4 #5, 7 #3, and 8 #6]

(10) For boilers demonstrating compliance with the CO emission limit using an oxygen analyzer system that is not an oxygen trim system, you must maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen concentration measured during the most recent CO performance test, as specified in Table 8 of Subpart DDDDD of Part 63. Boilers demonstrating compliance with the CO limit using CO CEMS are not subject to an oxygen concentration operating limit.

[Authority for term: 40 CFR 63.7515(i), 40 CFR 63.7525(a), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 4 #9, 7 #4 and 8 #9]

(11) For boilers demonstrating compliance with the CO emission limit using an oxygen trim system, you must set the oxygen level no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test according to Table 7 of Subpart DDDDD of Part 63. Boilers demonstrating compliance with the CO limit using CO CEMS are not subject to an oxygen concentration operating limit.

[Authority for term: 40 CFR 63.7515(i), 40 CFR 63.7525(a), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 7 #4]

(12) For boilers equipped with a wet scrubber or dry sorbent injection electing to demonstrate compliance with the HCl emission limits using an SO_2 CEMS, you must maintain the 30-day rolling average SO_2 CEMS emission rate at or below the highest hourly average SO_2 emission rate measured during the most recent HCl performance test demonstrating compliance with the HCl emission limitation according to 40 CFR 63.7530(b), 40 CFR 63.7525(m), and Table 8 of Subpart DDDDD of Part 63.

[Authority for term: 40 CFR 63.7530(b), 40 CFR 63.7530(i) and 40 CFR Part 63, Subpart DDDDD, Table 4 #10, 7 #2, and 8 #11]

(13) For boilers demonstrating compliance using performance testing, the operating load of each unit shall be maintained such that it does not exceed 110% of the highest hourly average operating load established during the most recent performance test demonstrating compliance, as specified in 40 CFR 63.7520(c) and Table 8 to Subpart DDDDD of Part 63.

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

(14) The permittee shall only burn fuel types and fuel mixtures that were used to demonstrate compliance with the applicable emissions limit.

a. All fuel types and mixtures of fuels burned must result in one of the following:

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

ii. lower fuel input of Cl, Hg, and TSM than the maximum values calculated during the last performance test, if demonstrating compliance through performance testing, unless new input limits are established according to 40 CFR 63.7540(a)(4),(6), and/or (16).

[Authority for term: 40 CFR 63.7540(a)(2)]

b. 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)]

c. 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)]

d) Monitoring and/or Record keeping Requirements

(1) The permittee shall maintain monthly records of the total quantity of coal received, and the results of the analyses for ash content, sulfur content, and heat content.

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

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

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

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

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

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

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

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

If the permittee becomes subject to a particulate emission limit under 40 CFR Part 63, Subpart DDDDD, the monitoring and recordkeeping requirements specified in 40 CFR sections 63.7525 and 63.7535 will replace the monitoring and recordkeeping requirements of 40 CFR Part 64, and therefore, this provision will no longer apply after the compliance date in 40 CFR Part 63, Subpart DDDDD.

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

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

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

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

For emissions unit B001:

Parameter and Range

Secondary Current 144 – 960 milli-amps

Secondary Voltage 12.7 - 63.7 kilovolts

For emissions unit B004:

Parameter and Range

Secondary Current 35 – 400 milli-amps

Secondary Voltage 12 - 60 kilovolts

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

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

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

The monitoring requirements specified in 40 CFR sections 63.7525 and 63.7535 will replace the monitoring requirements of 40 CFR Part 64, and therefore, this provision will no longer apply after the compliance date in 40 CFR Part 63, Subpart DDDDD.

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

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

specified in OAC rule 3745-17-07(A)(3)(b)(i). An electronic copy or hardcopy record of the temperature during periods of start-up and shutdown shall be maintained.

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

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

(5) The permittee shall develop a site-specific fuel monitoring plan for each type of fuel burned in boilers that burn more than a single type of fuel for which the permittee elects to demonstrate compliance with any of the applicable emission limits in Table 2 through performance testing. For purposes of the fuel analysis requirements, boilers that use a supplemental fuel only for startup, shutdown, and transient flame stability purposes qualify as units that burn a single type of fuel and testing is not required for fuel burned in these units. Fuel analyses are not required for fuels used for only startup or shutdown, or for transient flame stability, or for natural gas, refinery gas, other gas 1 fuels, or fuels exempted in 40 CFR 63.7510(a)(2)(i) or (ii). The permittee shall also include in the site-specific fuel monitoring plan each fuel burned in a boiler for which the permittee chooses to demonstrate compliance with the any of the applicable emission limits in Table 2 through fuel analyses.

a. 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.

[Authority for term: 40 CFR 63.7521(a), (b), and (g), 40 CFR 63.7510(a)(2) and (b), and 40 CFR 63.7530(a)]

(6) 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/m^3 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/m^3 of Hg, semiannual sampling and analysis shall be conducted;

c. if any semi-annual fuel analyses demonstrates the Hg constituents to exceed 30 micrograms/m^3 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/m^3 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/m^3 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/m^3 of Hg but less than or equal to 30 micrograms/m^3 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/m^3 of Hg, no further sampling or fuel analysis is required;

g. if the initial fuel analysis exceeds 40 micrograms/m^3 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 63.7521(g), 40 CFR 63.7540(c), 40 CFR 63.7530(g), and 40 CFR 63.7521(f) through (i)]

(7) For each CMS used to demonstrate compliance with 40 CFR Part 63, Subpart DDDDD (including CEMS, COMS, or CPMS), the permittee shall develop a site-specific monitoring plan. This requirement to develop and submit a site specific monitoring plan does not apply to existing CEMS or COMS operated according to the performance specifications under Appendix B to Part 60 of this chapter and that meet the requirements of §63.7525. The site-specific monitoring plan shall require all CMS (systems required by rule) be maintained in continuous operation during process operations, except as allowed by rule. Using the process described in §63.8(f)(4), you may request approval of alternative monitoring system quality assurance and quality control procedures in place of those specified in this paragraph and, if approved, include the alternatives in your site-specific monitoring plan.

a. 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 or other interface at a location that is representative of control 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), including at minimum a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit for any COMS;

v. ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);

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) (as applicable in Table 10 to 40 CFR Part 63, Subpart DDDDD), (e)(1), and (e)(2)(i).

(8) For each CMS used to demonstrate compliance with 40 CFR Part 63, Subpart DDDDD (including CEMS, COMS, or CPMS), the permittee shall develop a performance evaluation test plan. The performance evaluation test plan shall 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.

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

b. The external QA program shall include, at a minimum, provisions for systems audits that include the opportunity for on-site evaluation by Ohio EPA of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

All CMS shall be installed, operational, and the data verified, as specified in 40 CFR 63.7525, either prior to or in conjunction with conducting performance tests required under 40 CFR 63.7.

[Authority for term: 40 CFR 63.7505(d), 40 CFR 63.7525, and 40 CFR 63.8(d) and (e)]

(9) For sources demonstrating compliance using a dry electrostatic precipitator (ESP) that are not using a PM CPMS or PM CEMS to demonstrate compliance, a continuous opacity monitoring system (COMS) shall be installed, operated, and maintained according the procedures specified in 40 CFR 63.7525(c), the portions of 40 CFR 63.8 applicable through Table 10 40 CFR Part 63 Subpart DDDDD, the site-specific monitoring plan, 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 as specified in 40 CFR 63.8(c)(4)(i). 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. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, startup and shutdown periods, and downtime, all readings shall be used to calculate the daily block average.

[Authority for term: 40 CFR 63.7525(c), 40 CFR 63.7535, 40 CFR 63.7575, 40 CFR 63.8, and 40 CFR Part 63, Subpart DDDDD Table 8 #1]

(10) For a boiler equipped with fabric filter control and electing to demonstrate compliance using a bag leak detection system (BLDS), it shall be installed, calibrated, and maintained in accordance with 40 CFR 63.7525(j) as follows:

a. The bag leak detection sensor must be installed in a position that is representative of the relative or absolute PM loadings for each exhaust stack, roof vent, or compartment of the fabric filter.

b. A performance evaluation must be conducted in accordance with the monitoring plan and consistent with guidance provided in EPA-454/R-98-015.

c. The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter or less.

d. The BLDS must be equipped with a device to record continuously the output signal from the sensor.

e. The BLDS must alert plant operating personnel in an easily recognizable manner (i.e., sight or sound) when an increase in relative PM emissions are detected over a preset level (alert set point). The BLDS instrumentation and alert may be shared among multiple bag leak detectors.

f. The BLDS must be continuously operated while the boiler is operating.

[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 8 #3]

(11) Each boiler in the subcategories designed to burn coal/solid fuels or heavy liquid fuels and having an annual average heat input greater than 250 MMBtu per hour from solid fossil fuels or heavy liquid fuels and demonstrating compliance with the PM limit must be equipped with either a PM CPMS or PM CEMS.

a. If choosing to install the PM 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.

i. The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation detection of PM in the exhaust gas or representative exhaust gas sample. 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. 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 PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to at least two times your allowable emission limit.

ii. An initial performance evaluation for the PM CPMS shall be conducted no later than 180 days after the compliance date specified in 40 CFR 63.7495. The evaluation shall be conducted according to the applicable requirements of 40 CFR 60.8(e) and Performance Specification 11 at 40 CFR Part 60, Appendix B

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

(12) If demonstrating compliance using a wet PM scrubber, the scrubber shall be equipped with CPMS to measure the pressure drop and liquid flow rate. The CPMS shall be installed, operated, and maintained according to 40 CFR 63.7525(d). 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, one representing each of the four 15-minute periods in an hour, for each valid hour of data. Except for

data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average pressure drop and liquid flow rate for each operating day.

[Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d), 40 CFR Part 63.7535, 40 CFR 63.7575 and 40 CFR Part 63, Subpart DDDDD Tables 7 #1 and 8 #4]

(13) If demonstrating compliance using a wet acid gas (HCl) scrubber, the scrubber shall be equipped with CPMS to measure the effluent pH and liquid flow rate. The CPMS shall be installed, operated, and maintained according to 40 CFR 63.7525(d). 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, one representing each of the four 15-minute periods in an hour, for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average pH and liquid flow rate for each operating day.

[Authority for term: 40 CFR 63.7530(b)(4)(i), 40 CFR 63.7525(d), 40 CFR Part 63.7535, 40 CFR 63.7575 and 40 CFR Part 63, Subpart DDDDD Tables 7 #2 and 8 #5]

(14) If you demonstrate compliance using an electrostatic precipitator (ESP) operating with a wet scrubber and are not using a PM CPMS or PM CEMS to demonstrate compliance, the ESP shall be equipped with a CPMS to measure the total secondary electric power input (voltage and current) to the precipitator collection plates. The CPMS shall be installed, operated, and maintained according to 40 CFR 63.7525(d) .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, one representing each of the four 15-minute periods in an hour, for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average total secondary electric power input for each operating day.

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

(15) If you demonstrate compliance with the HCl emission limitation using a dry scrubber and do not use an HCl CEMS to demonstrate compliance, the scrubber shall be equipped with a CPMS to measure the sorbent injection rate. The CPMS shall be installed, operated, and maintained according to 40 CFR 63.7525(d). 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, one representing each of the four 15-minute periods in an hour, for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average sorbent injection rate for each operating day.

[Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d), 40 CFR 63.7535, 40 CFR 63.7575 and 40 CFR Part 63, Subpart DDDDD Tables 7 #2 and 8 #6]

(16) If you demonstrate compliance with the Hg emission limitation using a dry scrubber and do not use an Hg CEMS to demonstrate compliance, the scrubber shall be equipped with a CPMS to measure the activated carbon injection rate. The CPMS shall be installed, operated, and maintained according to 40 CFR 63.7525(d). 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, one representing each of the four 15-minute periods in an hour, for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average carbon injection rate for each operating day.

[Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d), 40 CFR 63.7535, 40 CFR 63.7575 and 40 CFR Part 63, Subpart DDDDD Tables 7 #3 and 8 #6]

(17) 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:

a. For boilers subject to a CO emission limit and using the option to install an oxygen analyzer system other than an oxygen trim system to demonstrate compliance, the oxygen analyzer system shall monitor the oxygen in the boiler flue gas at the outlet of the boiler 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 Table 8 #9]

b. For boilers subject to a CO emission limit and using the option to install a CEMS to demonstrate compliance, the CEMS shall meet the following requirements:

i. The CO CEMS shall be installed, certified, operated, and maintained in accordance with Performance Specification 4, 4A, or 4B of Part 60 Appendix B, 40 CFR 63.7525(a), 40 CFR 63.7540(a)(8), the site-specific monitoring plan ,and the applicable provisions of 40 CFR 63.8.

ii. The O2 CEMS shall be installed, certified, operated, and maintained in accordance Performance Specification 3 at 40 CFR Part 60, Appendix B, the site-specific monitoring plan, 40 CFR 63.7525(a), 63.7540(a)(8), and the applicable provisions of 40 CFR 63.8.

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

iv. The permittee shall conduct, or have conducted, performance evaluations of the CO CEMS on or before 180 days after the compliance date specified in 40 CFR 63.7495 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. 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.

v. 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.

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

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

viii. The CO and O2 CEMS data shall be collected concurrently at the outlet of the control device.

ix. The CEMS must complete a minimum of one cycle of CO and oxygen CEMS operation (sampling, analyzing, and data recording) for each successive 15-minute period. Collect at least four data values representing the four 15-minute periods in an hour. At least two 15-minute data values must be collected during any hour when CEMS calibration, quality assurance, or maintenance activities are being performed.

x. CO and oxygen data must be collected concurrently at the outlet of the boiler(s) control device.

xi. 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, in accordance with Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR Part 60, Appendix A-7. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup/shutdown periods, all readings shall be used to calculate the 10-day or 30-day rolling average (as applicable) for each operating day.

xii. Carbon monoxide must be continuously monitored in accordance with 40 CFR 63.7525(a) and 40 CFR 63.7535.

[Authority for term: 40 CFR 63.7525(a), 40 CFR 63.7510(c), 40 CFR 63.7540(a)(8), and 40 CFR 63.8]

c. For boilers subject to a CO emission limit and using the option to install an oxygen trim system, the oxygen analyzer 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 Table 7 #4]

(18) 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 at the outlet of the boiler and downstream of all emission control devices, and must be installed, certified, operated, and maintained in accordance with 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 CEMS must be operated as specified in 40 CFR 63.7535(b). Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average for each operating day. 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. The initial performance evaluation of the SO_2 CEMS for the existing boilers(s) shall be completed by no later than 180 days after the compliance date specified in 40 CFR 63.7495, 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 7 #2 and 8 #11]

(19) For boilers demonstrating compliance with emission limitations using performance testing, 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 Tables 7 #5 and 8 #10]

(20) 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 and compliance is required, except for periods of monitoring system malfunction, repairs, 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. Except for periods of monitoring system malfunctions, repairs, and required quality assurance and quality control activities, failure to collect required data is a deviation from the monitoring requirements. 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),(d)]

(21) 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)]

(22) 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)]

(23) Each pH monitoring system used to demonstrate continuous compliance shall meet the following requirements.

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

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

c. 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

d. performance evaluations, including a 2-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit,, shall be conducted in accordance with the monitoring plan at the time of each performance test and no less frequently than quarterly.

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

(24) Each secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber used to demonstrate compliance with Subpart DDDDD shall meet the following requirements:

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

b. 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)]

(25) 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:

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

b. 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)]

(26) Where demonstrating compliance with the Hg standard using an Hg CEMS, the CEMS must be installed, certified, maintained, and operated in accordance with B40 CFR 63.7540(a)(14), Performance Specifications 6 and 12A of Part 60 Appendix Performance Specifications 6 and 12A of Part 60, Appendix B and quality assurance procedure 6 of 40 CFR Part 60 Appendix F. Alternatively, a sorbent trap based

integrated monitor may be installed and operated in accordance with Performance Specification 12B of Part 60 Appendix B. An initial performance evaluation of the Hg CEMS for the existing boiler(s) shall be completed by no later than 180 days after the compliance date specified in 40 CFR 63.7495, or no later than 180 days following the notification to the Director that Hg CEMS will be used for compliance. 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 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. for each day of operation, the hourly average Hg concentration data and stack gas volumetric flow rate data must be measured and recorded;

b. 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;

c. 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;

d. 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;

e. 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; and

f. 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)(14)]

(27) Where demonstrating compliance with the HCl standard using an HCl CEMS, the CEMS must be installed, certified, maintained, and operated in accordance with 40 CFR 63.7540(a)(15), the applicable performance specification in Part 60 Appendix B, and quality assurance procedure 6 of 40 CFR Part 60, Appendix F. The initial performance evaluation of the HCl CEMS for the existing boiler(s) shall be completed by no later than 180 days after the compliance date specified in 40 CFR 63.7495, or no later than 180 days following the notification to the Director that HCl CEMS will be used for compliance. 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 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.

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

b. 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;

c. 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;

d. 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;

e. 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; and

f. 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.

[Authority for term: 40 CFR 63.7510(b), 40 CFR 63.7525(l) and 40 CFR 63.7540(a)(15)]

(28) 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. A copy of the federally enforceable permit restricting the annual average capacity factor to no more than 10% shall also be retained.

[Authority for term: 40 CFR 63.7525(k), 40 CFR 63.7555(d)(3) and 40 CFR 63.7575]

(29) 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, according to the requirements in 40 CFR 63.10(b)(2)(xiv);

b. records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations of CMS as required in 40 CFR 63.10(b)(2)(viii);

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

i. records required under 40 CFR 63.10(b)(2)(vii) through (xi):

(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 and CMS performance evaluations;

(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 as required by 40 CFR 63.6(h)(7)(i) and (ii);

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, including all periods when a COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit), and the corrective actions taken to return the CMS to normal operation;

v. all 6-minute averages (and daily block averages as applicable) for COMS periods during which the COMS is not out of control;

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

vii. requests for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i); and

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

d. the date, time, and duration of each BLDS 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 conditions exist for an alarm. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alert time is counted. If corrective action is required, each alert shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alert time shall be counted as the actual amount of time taken to initiate corrective action.

e. the records required in Table 8 to the subpart, including records of all monitoring data and calculated averages for the applicable operating limits, such as opacity, pressure drop, pH, and operating load, and oxygen concentration of the exhaust stack, and

f. For each boiler subject to emission limits in Table 2 of the subpart, the following:

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

ii. 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:

(a) 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 241.3(d)(1);

(b) 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 241.2;

(c) if combusting a fuel that received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), a record that documents how the fuel satisfied the requirements of the petition process; and

(d) if combusting non-hazardous secondary materials as fuel per 40 CFR 241.4, records that document that the material is listed as a non-waste under 40 CFR 241.4(a);

iii. a copy of the calculations supporting documentation of the maximum Cl fuel input using Equation 7 of 40 CFR 63.7530(b), for sources that demonstrate compliance through performance testing; and if demonstrating compliance with the HCl emission limit through fuel analyses, a copy of all calculations and supporting documentation of the HCl emission rate using Equations 15 and 16 of 40 CFR 63.7530(c); supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCL emission rates (the results from one fuel analysis may be used for multiple boilers provided they are all burning the same fuel type and the chlorine fuel input or HCl emission rate is calculated for each boiler);

iv. a copy of the calculations supporting documentation of the maximum Hg fuel input using Equation 8 of 40 CFR 63.7530(b), for sources that demonstrate compliance through performance testing; and if demonstrating compliance with the Hg emission limit through fuel

analyses, a copy of all calculations and supporting documentation of the Hg emission rate using Equations 15 and 17 of 40 CFR 63.7530(c); supporting documentation should include results of any fuel analyses and basis for the estimates of maximum Hg fuel input or Hg emission rates (the results from one fuel analysis may be used for multiple boilers provided they are all burning the same fuel type and the Hg fuel input or Hg emission rate is calculated for each boiler);

v. a copy of the calculations supporting documentation of the maximum TSM fuel input using Equation 9 of 40 CFR 63.7530(b), for sources that demonstrate compliance through performance testing; and if demonstrating compliance with the TSM emission limit through fuel analyses, a copy of all calculations and supporting documentation of the TSM emission rates using Equations 15 and 18 of 40 CFR 63.7530(c); supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates (the results from one fuel analysis may be used for multiple boilers provided they are all burning the same fuel type and the Hg fuel input or Hg emission rate is calculated for each boiler);

vi. 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, including air pollution control equipment or fuel composition, that would cause relevant emissions increases, to qualify for less frequent than annual stack testing;

vii. the occurrence and duration of each malfunction of any subject boiler and/or the associated air pollution control and monitoring equipment;

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

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

g. 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;

h. if burning an alternative fuel in a boiler designed to burn gas 1 (subcategory) fuels, i.e., fuels other than natural gas, refinery gas, gaseous fuels subject to another subpart of Part 60, 61, 63, or 65, or other gas 1 fuel, the records of the total hours per calendar year that the alternative fuel was burned and the total hours per calendar year that the boiler operated during periods of gas curtailment or gas supply emergencies;

i. if electing to demonstrate compliance through emissions averaging for existing boilers, the averaging implementation plan required by 40 CFR 63.7522(g); 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 monitoring records; and after the first year, calculations for each rolling 12-months;

j. if electing to use efficiency credits from energy conservation measures to demonstrate compliance according to 40 CFR 7533, a copy of the Implementation Plan required in 40 CFR 63.7533(d) and all data and calculations used to establish the efficiency credits according to 40 CFR 63.7533(b), (c), and (f); and

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

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(c) and (d), 40 CFR 63.7540(a), 40 CFR 63.7555 and 40 CFR 63.7560, and 40 CFR 63, Subpart DDDDD Table 3 #5 and #6]

(30) 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.

[Authority for term: 40 CFR 63.7560]

e) Reporting Requirements

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

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

corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

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

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

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

(2) Quarterly reports shall be submitted concerning the quality and quantity of coal received for burning in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:

a. the total quantity of coal received (tons);

b. the average ash content (percent) of the coal received;

c. the average sulfur content (percent) of the coal received;

d. the average heat content (Btu/pound) of the coal received; and

e. the average sulfur dioxide emissions rate (pounds sulfur dioxide/MMBtu actual heat input) from the coal received.

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

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

(3) If you intend to use an alternative analytical method other than those required by Table 6 to Subpart DDDDD of 40 CFR Part 63, the site-specific fuel analyses plan must be submitted to the EPA Administrator (Region 5) no later than 60 days before the date of the intended initial compliance demonstration.

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

(4) 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):

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

b. 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. 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). The notification must 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); the notification must also include the site-specific test plan, site-specific monitoring plan and site-specific performance evaluation test plan, if requested;

c. the Initial Notification of Compliance shall be submitted according to 40 CFR 63.9(h)(2)(ii) and include all performance test and fuel analyses results completed to demonstrate compliance, as applicable; 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 according to 40 CFR 63.10(d)(2). Performance test results shall be signed by the person responsible for the test. The Initial Notification of Compliance Status report must contain the following information:

i. A description of the facility boilers including:

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

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

(c) a description of the add-on controls used on each boiler to comply with Subpart DDDDD;

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

(e) identification of fuel(s) that were determined to be 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 whether you 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;

(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; and

(d) if electing to demonstrate that a gaseous fuel meets the specifications of another gas 1 fuel, a certification that the initial fuel specification test meets the gas specification.

d. If the unit is in the subcategory designed to burn natural gas, refinery gas, or other gas 1 fuels, and there are plans to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of this part, Part 60, 61, or 65, or other gas 1 fuel during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, a notification of alternative fuel use must be submitted within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification must include the following information:

i. facility name and address;

ii. identification of the affected unit(s);

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

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

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

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

e. If there are any plans to commence or recommence combustion of solid waste, notification must be made at least 30 days prior to the date combustion of solid waste will commence or recommence. The notification must identify:

i. the name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that will commence burning solid waste, and the date of the notice;

ii. the currently applicable subcategories under this subpart;

iii. the date on which you became subject to the currently applicable emission limits;

iv. the date upon which you will commence combusting solid waste.

f. if there has been a fuel switch or physical change to a boiler, and this fuel switch or change to the boiler has resulted in the applicability of a different subcategory, notification of the switch must be made within 30 days of the switch or change. This notification must identify:

i. the name of owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that have switched fuels or were physically changed;

ii. the currently applicable subcategory of the boiler(s);

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

iv. 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)]

(5) The permittee shall submit each applicable report in Table 9 to Part 63, Subpart DDDDD by the dates in Table 9. For boilers that are subject only to a requirement to conduct 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 that is specified for each boiler in 40 CFR 63.7495 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) after the specified compliance date. 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 (which must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31), 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(a),(b)]

(6) The compliance reports shall include the information identified in 40 CFR 63.7550(c)-(e). The Compliance Reports for 40 CFR Part 63, Subpart DDDDD must contain the following information as applicable for each boiler, as provided in 40 CFR 63.7550(c)(1)-(4):

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 verification that the operating limits have not changed or 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, scrubber pH, scrubber liquid flow rate, scrubber pressure drop), as applicable;

i. if qualifying for the less frequent than annual performance testing in accordance with 40 CFR 63.7515(b) or (c), 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, for sources that demonstrate compliance through performance testing; or

   ii. 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 any fuel specification analysis conducted according to §§ 63.7521(f) and 63.7530(g);

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 initial 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 does not exceed 40 micrograms/m^3 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 it was not done annually, biennially, or on a 5-year period, as applicable, and was 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 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 63.7525(b)(5)(iv), 40 CFR 63.7540(b), 40 CFR 63.7515(f), and 40 CFR Subpart DDDDD Tables 8 and 9]

(7) If using energy conservation credits to demonstrate compliance under 40 CFR 63.7533, documentation that the energy conservation measures implemented continue to generate the credit claimed.

[Authority for term: 40 CFR 63.7533(g)]

(8) 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) and reports required by Table 9 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 63.7525(b)(5)(iv), 40 CFR 63.7515(f)]

f) Testing Requirements

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

a. Emission Limitations:

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:

i. For boilers combusting at least 10% coal and <10% biomass on an annual heat input basis:

0.040 lb of filterable PM/MMBtu of heat input, or 0.042 lb filterable PM/MMBtu of steam output, or 0.49 lb filterable PM/MWh; or 5.3 E-05 lb TSM/MMBtu of heat input; or 5.6E -05 lb of TSM/ MMBtu of steam output; or 6.5E -04 lb TSM/MWh;

0.022 lb of HCl/MMBtu of heat input, or 0.025 lb HCl/MMBtu of steam output or 0.27 lb HCl/MWh;

5.7 E -06 lb of Hg/MMBtu of heat input, or 6.4 E -06 lb Hg/MMBtu of steam output or 7.3 E -05 lb Hg/MWh; and

130 ppm CO by volume on a dry basis, corrected to 3% O_2, 3-run average or 0.011 lb CO/MMBtu of steam output, 3-run average or 1.4 lb CO/MWh, 3-run average; or 320 ppm CO by volume on a dry basis, corrected to 3% O_2, as a 30-day rolling average calculated from 1-hour daily averages if using CEMS.

ii. For boilers combusting at least 10% biomass on an annual heat input basis:

0.051 lb of filterable PM/MMBtu of heat input, or 0.052 lb filterable PM/MMBtu of steam output, or 0.71 lb filterable PM/MWh, or 6.5 E-03 lb of TSM/MMBtu of heat input, or 6.6E -03 lb TSM/ MMBtu of steam output; or 9.1E -02 lb TSM/MWh;

0.022 lb of HCl/MMBtu of heat input or 0.025 lb HCl/MMBtu of steam output, or 0.27 lb HCl/MWh;

5.7 E -06 lb of Hg/MMBtu of heat input, or 6.4E -06 lb Hg/MMBtu of steam output, or 7.3E -05 lb Hg/MWh;

2400 ppm CO by volume on a dry basis, corrected to 3% O_2, 3-run average, or 1.9 lb CO/MMBtu of steam output, 3-run average, or 27 lb CO/MWh, 3-run average, or 2000 ppm CO by volume on a dry basis, corrected to 3% O_2, as a 10-day rolling average, if using CEMS.

Applicable Compliance Method:

Performance Testing

For existing boilers, the permittee shall conduct an initial performance test on or before the date 180 days after the date specified for compliance in 40 CFR 63.7495 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). Boilers equipped with CO and O_2 CEMS are exempt from the performance test requirements for CO and the oxygen concentration operating limit if meeting the requirements of 40 CFR 63.7525(a) and 40 CFR 63.7540(a)(8).

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.

Boilers demonstrating continuous compliance using CEMS or fuel analysis are not required to conduct subsequent performance tests.

Performance testing (initial or subsequent) is not required for boilers combusting gas 1 fuels, , where monthly records can document the fuel usage and that the boiler meets the definition of a unit designed to burn gas 1 in 40 CFR 63.7575. 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 permittee shall develop a site-specific test plan. The site-specific 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. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

iii. 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).

iv. The external QA program shall provide, at a minimum, for a test method performance audit during the performance test.

The performance audits shall consist of blind audit samples, provided by an accredited audit sample provider, in order to provide a measure of test data bias according to 40 CFR 63.7(c)(2)(iii);

The Director may request additional relevant information following the receipt and review of the site-specific test plan.

[Authority for term: 40 CFR 63.7(c)]

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 O_2 or CO_2 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 O_2 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)). The measured result for a multiple component analysis may include a combination of method detection level data and analytical data reported above the method detection level.

** 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 they 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 O_2 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.

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:

v. sampling ports adequate for the appropriate testing methods;

vi. safe sampling platform(s);

vii. safe access to sampling platform(s);

viii. utilities for sampling and testing equipment; and

ix. 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)]

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.

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 be conducted under the conditions specified in Tables 5 and 7, and must meet the minimum sampling times and volumes specified in the last column of Table 2 for existing boilers.

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. Efficiency credits may be used by sources demonstrating compliance with the emissions averaging provisions in 40 CFR 63.7522(e) and (f).

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 for each hour shall be computed using all of the 15-minute readings taken during each

performance test for each hour. The maximum operating load shall be calculated as the highest hourly average established during the most recent performance tests multiplied by 1.1 (110%).

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.

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:

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.

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 a performance test demonstrating compliance; and shall be established as the minimum operating parameter for the ESP.

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.

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 a performance test 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.

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 a performance test 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.

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 SO_2 CEMS, the permittee shall establish the unit-specific maximum SO_2 operating limit by continuously monitoring SO_2 and calculating the hourly average SO_2 emission rate during the most recent 3-run performance test for HCl. The maximum SO_2 operating limit shall be equal to the highest hourly average SO_2 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.

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

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.

Personnel from the Ohio EPA Northeast District Office, 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 control equipment.

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 Ohio EPA Northeast District Office 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.

[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 rule 3745-110, and OAC rule 3745-15-04(A)]

(2) Emissions Averaging

a. For existing boilers, the permittee may elect to use emissions averaging to demonstrate compliance with the emission limits for PM (TSM), HCl, or Hg, provided the boilers will be burning the same fuel and/or are in the same subcategory, as identified in 40 CFR 63.7499 and as allowed in 40 CFR 63.7522(b). The boilers in an emissions averaging group for which each boiler is vented to a different stack shall meet the following requirements and their average emissions calculated as follows:

i. for each boiler in the averaging group, the emission rate achieved during the initial compliance test (for the HAP or HAP surrogate being averaged) shall not exceed the emission level that was achieved on 1/31/13; or the control technology employed during the initial compliance test shall not be less effective for the HAP/surrogate being averaged than the control technology employed on 1/31/13;

ii. initial compliance shall be demonstrated using the maximum rated heat input capacity or maximum steam generation capacity of each boiler and the results of the initial performance test or fuel analyses;

iii. to demonstrate initial compliance, the averaged emissions from the boilers shall not exceed 90% of the applicable emission limit(s) identified

in Table 2 of Part 63 Subpart DDDDD and the averaged emissions shall be calculated as follows:

(a) Where complying with the emission limits on a heat input basis, Equation 1a (from 40 CFR 63.7522(e)(1)) shall be used to calculate the average weighted emissions of PM or TSM, HCl, and/or Hg. The weighted average emissions times the discount factor of 1.1, shall not exceed the emission limitation for the same HAP/surrogate identified in Table 2 to this subpart:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times Hm) \div \sum_{i=1}^{n} Hm$$

where:

Ave Weighted Emissions = average weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant per MMBtu of heat input;

Er = emission rate, as determined during the initial or subsequent compliance demonstrations for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for unit "i", in lbs of pollutant/MMBtu;

Hm = maximum rated heat input capacity of unit, "i", in MMBtu/hour;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(b) Where complying with the emission limits on a steam generation output basis. Equation 1b (from 40 CFR 63.7522(e)(1)) shall be used to calculate the average weighted emissions of PM or TSM, HCl, and/or Hg. The weighted average emissions times the discount factor of 1.1 shall not exceed the emission limitation for the same HAP/surrogate identified in Table 2 to this subpart:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times So) \div \sum_{i=1}^{n} So$$

where:

Ave Weighted Emissions = average weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant per MMBtu of steam output;

Er = emission rate, as determined during the initial compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for unit "i", in lbs of pollutant/MMBtu steam output; *****

So = maximum steam output capacity of unit, "i", in MMBtu/hour;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(c) Where complying with the emission limits on an electrical generation output basis, Equation 1c (from 40 CFR 63.7522(e)(1)) shall be used to calculate the average weighted emissions of PM or TSM, HCl, and/or Hg. The weighted average emissions times the discount factor of 1.1, shall not exceed the emission limitation for the same HAP/surrogate identified in Table 2 to this subpart:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times Eo) \div \sum_{i=1}^{n} Eo$$

where:

Ave Weighted Emissions = average weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant per megawatt hour (lbs/MWh);

Er = emission rate, as determined during the initial compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM, derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for unit "i", in lbs of pollutant/MWh; *****

Eo = maximum electric generating output capacity of unit, "i", in MWh;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(d) Where the maximum rated heat input capacity of one or more steam generating boilers cannot be determined, Equation 2 (from 40 CFR 63.7522(e)(2)) can be used in place of Equation 1a, to calculate the average weighted emissions of PM or TSM, HCl, and/or Hg based on heat input using a conversion factor to calculate the heat input per pounds of steam generated. The weighted average emissions times the discount factor of 1.1 shall not exceed the emission limitation for the same HAP/surrogate identified in Table 2 to this subpart:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times Sm \times Cf_i) \div \sum_{i=1}^{n} Sm \times Cf_i$$

where:

Avg. Weighted Emissions = average weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant per MMBtu of heat input;

Er = emission rate, as determined during the most recent compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM, derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for boiler "i", in lbs of pollutant/MMBtu of heat input;

Sm = maximum steam generation by boiler, "i", in lbs/hour;

Cf_i = conversion factor, calculated from the most recent compliance test, in million Btu of heat input per pounds of steam generated for unit, I;

n = number of existing boilers participating in the emissions averaging option; and

1.1 = the required discount factor.

iv. Continuous compliance with the emission limits in Table 2 shall be demonstrated on a monthly basis, determined at the end of every month (12 times per year) using the heat input, steam generation output, or electric generation output of each boiler. The first monthly period begins on the compliance date specified in 40 CFR 63.7495. If the affected source elects to collect monthly data for up to the 11 months preceding the first monthly period, these additional data points can be used to compute the 12-month rolling average in 40 CFR 63.7522(f)(3) of this section.

(a) Where complying with the emission limits on an heat input basis, for each calendar month Equation 3a (from 40 CFR 63.7522(f)(1))

shall be used to calculate the monthly average-weighted emissions based on the heat input for the existing boilers participating in the emissions averaging option:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times Hb) \div \sum_{i=1}^{n} Hb$$

where:

Avg. Weighted Emissions = average-weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant/MMBtu of heat input, for the calendar month;

Er = emission rate, as determined during the most recent compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for unit, "i", in lbs of pollutant/MMBtu;

Hb = the actual heat input for the calendar month for unit, "i", in MMBtu;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(b) Where complying with the emission limits on a steam generation output basis, for each calendar month Equation 3b (from 40 CFR 63.7522(f)(1)) shall be used to calculate the monthly average-weighted emissions based on steam generation output for the existing boilers participating in the emissions averaging option:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times So) \div \sum_{i=1}^{n} \sum So$$

where:

Avg. Weighted Emissions = average-weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant/MMBtu of steam output, for the calendar month;

Er = emission rate, as determined during the most recent compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and

calculated according to 40 CFR 63.7530(c)) for unit, "i", in lbs of pollutant/MMBtu of steam output;

So = the steam output for the calendar month for unit, "i", in MMBtu;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(c) Where complying with the emission limits on an electricity generation output basis, for each calendar month Equation 3c (from 40 CFR 63.7522(f)(1)) shall be used to calculate the monthly average-weighted emissions based on electrical generation output for the existing boilers participating in the emissions averaging option:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times Eo) \div \sum_{i=1}^{n} Eo$$

where:

Avg. Weighted Emissions = average-weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant/MWh for the calendar month;

Er = emission rate, as determined during the most recent compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for unit, "i", in lbs of pollutant/MWh;

Eo = the electric generating output for the calendar month for unit, "i", in MWh;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(d) For each calendar month where the heat input of one or more boilers cannot be determined, Equation 4 (from 40 CFR 63.7522(f)(2)) can be used in place of Equation 3a to calculate the monthly average-weighted emissions based on heat input using a conversion factor to calculate the heat input per pounds of steam generated:

n n

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1} (Er \times Sa \times Cf_i) \div \sum_{i=1} (Sa \times Cf_i)$$

where:

Avg. Weighted Emissions = monthly, average-weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant/MMBtu of heat input;

Er = emission rate, as determined during the most recent compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for boiler, "i", in lbs of pollutant/MMBtu;

Sa = actual steam generation for the calendar month for boiler, "i", in pounds;

Cf_i = conversion factor, as calculated during the most recent compliance test, in MMBtu of heat input per pounds of steam generated for boiler, I;

n = number of existing boilers participating in the emissions averaging option; and

1.1 = the required discount factor.

***** If taking credit for energy conservation measures from a boiler, the emission level for that boiler may be adjusted (E_{adj}) in accordance with 40 CFR 63.7533.

[Authority for term: 40 CFR 63.7522]

v. Following the first 12 months of the compliance period (or the first 12 months of data collection, if the permittee elects to collect data prior to the compliance date), the rolling, 12-month average emission rate(s) shall be calculated using the monthly weighted-average emission rates from each month, as calculated above, using Equation 5 from 40 CFR 63.7522 as follows:

$$E_{avg} = \sum_{i=1}^{n} ER_i \div 12$$

where:

E_{avg} = rolling, 12-month, average emission rate, in lbs/MMBtu heat input, lbs/MMBtu of steam output, or lbs/MWh; and

ER_i = monthly weighted average emission rate, for month "i", in lbs/MMBtu heat input, lbs/MMBtu of steam output, or lbs/MWh, as calculated using Equations 3a, 3b, 3c, or 4 for each month's "Ave Weighted Emissions".

Compliance is demonstrated each month if the rolling, 12-month, average emission rate from the existing boilers does not exceed 90% of the applicable limit in Table 2 to the subpart for the averaging pollutant(s).

[Authority for term: 40 CFR 63.7522]

vi. No later than 180 days before the date of an intended compliance demonstration based on emissions averaging, the permittee shall submit, upon request, an implementation plan for emission averaging to the appropriate district or local office of the Ohio EPA, Division of Air Pollution Control. The implementation plan shall include the following information for the boilers in each averaging group:

(a) the identification of all existing boilers in the/each averaging group;

(b) the subcategory of each averaging group as identified in 40 CFR 63.7499 or 63.7522(b);

(c) which of the pollutant emissions will be averaged, PM, TSM, HCl, and/or Hg;

(d) for each boiler in the averaging group, either the applicable HAP emission level or the control technology installed as of 1/31/13;

(e) the date on which compliance using emission averaging is to commence;

(f) the process parameter (heat input or steam generated) that will be monitored for each averaging group;

(g) the specific control technology or pollution prevention measure to be used for each boiler in the averaging group and the date of its installation or application, and if the pollution prevention measure reduces or eliminates emissions from multiple boilers, identify each boiler;

(h) the test plan for the measurement of PM or TSM, HCl, or Hg emissions in accordance with the requirements in 40 CFR 63.7520, i.e., to be included in the site-specific test plan;

(i) the operating parameters to be monitored for each control system or device consistent with 63.7500 and Table 4 and a description of how the operating limits will be determined;

(j) if requesting to monitor an alternative operating parameter pursuant to § 63.7525, the following:

(i) a description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s);

(ii) a description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and record keeping requirements; and a demonstration, to the satisfaction of the Administrator, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(k) a demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating load conditions.

[Authority for term: 40 CFR 63.7522(g)(1) and (2) and 40 CFR 63.63.7(c)]

vii. Following the compliance date specified in 40 CFR 63.7495, the permittee using emissions averaging for any subcategory of existing boilers, shall demonstrate compliance on a continuous basis by meeting the following requirements:

(a) for each calendar month, demonstrate compliance with the average-weighted emissions from the boilers in the averaging group, calculated in accordance with 40 CFR 63.7522(f) and (g);

(i) for each existing boiler participating in the emissions averaging option that is equipped with a dry control system that is subject to an opacity limit and not vented to a common stack, maintain opacity at or below the applicable limit;

(ii) for each group of units participating in the emission averaging option where each unit in the group is equipped with a dry control system that is subject to an opacity limit and vented to a common stack that does not receive emissions from non-affected units, maintain opacity at or below the applicable limit at the common stack;

(iii) for each existing boiler participating in the emissions averaging option that is equipped with a wet scrubber, the 30-day rolling average parameter values shall be maintained at or above the operating limits established during the most recent performance test; and

(iv) for each existing boiler participating in the emissions averaging option that is venting to a common stack containing affected units from other subcategories, the appropriate operating limits for each unit shall be maintained as specified in Table 4 to Subpart DDDDD.

Any instance where the permittee fails to comply with the continuous monitoring requirements above is a deviation from the requirements of Subpart DDDDD.

[Authority for term: 40 CFR 63.7541]

If demonstrating compliance through performance testing, annual performance testing shall be conducted for each pollutant (PM or TSM, HCl, or Hg) for which compliance is demonstrated through emissions averaging. Each performance test must be completed no more than 13 months following the previous performance test for each existing boiler participating in emissions averaging within the subcategory.

[Authority for term: 40 CFR 63.7515(a) and (c)]

viii. For a group of two or more existing affected units, each of which vents through a single common stack, you may average PM (or TSM), HCl, or Hg emissions to demonstrate compliance with the limits for that pollutant in Table 2 to this subpart if you satisfy the following:

(a) For a group of two or more existing units in the same subcategories, each of which vents through a common emissions control system to a common stack, that does not receive emissions from units in other subcategories or categories, you may treat such averaging group as a single existing unit for purposes of this subpart and comply with the requirements of this subpart as if the group were a single unit.

(b) For all other groups subject to the common stack requirements of 40 CFR 63.7522(h), including situations where the exhaust of affected units are each individually controlled and then sent to a common stack, the owner or operator may elect to:

(i) Conduct performance tests according to procedures specified in § 63.7520 in the common stack if affected units from other subcategories vent through a common stack. The emission limit for the stack shall be calculated using Equation 6 from 40 CFR 63.7522(j)(1), where the summation of the emission limits from Table 2 for the individual units is divided by the summation of the heat input from each unit sharing the stack:

$$En = \sum_{i=1}^{n} = (Eli \times Hi) / \sum_{i=1}^{n} Hi$$

where:

En = HAP emission limit, in lbs/MMBtu, ppm, or nanograms/dscm (ng/dscm);

Eli = Appropriate emission limit from Table 2 to the subpart for unit i, in lb/MMBtu, ppm, or ng/dscm; and

Hi = heat input form unit i, in MMBtu.

(ii) Conduct performance tests according to procedures specified in § 63.7520 in the common stack. If non-affected units vent to the common stack, the non-affected units must be shut down or vented to a different stack during the performance test unless the faculty determines to demonstrate compliance with the non-affected units venting to the stack; and

(iii) Meet the applicable operating limit specified in § 63.7540 and Table 8 to this subpart for each emission control system (except that, if each unit venting to the common stack has an applicable opacity operating limit, then a single continuous opacity monitoring system may be located in the common stack instead of in each duct to the common stack).

(c) Where a group of 2 or more existing boilers in the same subcategories vent through a common stack, the common stack may be treated as a separate stack for purposes of 40 CFR 63.7522(b) and included in an emissions averaging group.

[Authority for term: 40 CFR 63.7522(h)-(k)]

(3) CEMS

a. If using an Hg CEMS to demonstrate compliance, compliance with the applicable emission limit in Table 2 shall be demonstrated on a 30-day rolling average basis, defined in 40 CFR 63.7575 as the arithmetic mean of the previous 720 hours of valid operating data. Valid operating data excludes periods of startup and shutdown, periods when the unit is not operating, data collected during malfunctions, out of control periods, repairs, and required quality assurance or quality control activities.

b. If using an HCl CEMS to demonstrate compliance, compliance with the applicable emission limit in Table 2 shall be demonstrated on a 30-day rolling average basis, defined in 40 CFR 63.7575 as the arithmetic mean of the previous

720 hours of valid operating data. Valid operating data excludes periods of startup and shutdown, periods when the unit is not operating, data collected during malfunctions, out of control periods, repairs, and required quality assurance or quality control activities.

c. If using a PM CEMS to demonstrate compliance, compliance with the applicable emission limit in Table 2 shall be demonstrated on a 30-day rolling average basis, defined in 40 CFR 63.7575 as the arithmetic mean of the previous 720 hours of valid operating data. Valid operating data excludes periods of startup and shutdown, periods when the unit is not operating, data collected during malfunctions, out of control periods, repairs, and required quality assurance or quality control activities.

d. If using a CO CEMS to demonstrate compliance, compliance with the applicable emission limit in Table 2 shall be demonstrated on a 30-day rolling average basis, defined in 40 CFR 63.7575 as the arithmetic mean of the previous 720 hours of valid operating data. Valid operating data excludes periods of startup and shutdown, periods when the unit is not operating, data collected during malfunctions, out of control periods, repairs, and required quality assurance or quality control activities.

[Authority for term: 40 CFR 63.7525(a),(b) and (l), 40 CFR 63.7535, and 40 CFR 63.7575]

(4) Fuel Analysis

a. For each boiler burning more than one type of fuel and for which the permittee elects to demonstrate compliance with the applicable HCl, Hg, or TSM emission limits in Table 2 through performance testing or fuel analysis, an initial fuel analyses shall be conducted for each non-exempt of fuel burned in the boiler in accordance with 40 CFR 63.7521 and Table 6 to the subpart. For purposes of the fuel analysis requirements, boilers that use a supplemental fuel only for startup, shutdown, and transient flame stability purposes qualify as units that burn a single type of fuel and testing is not required for fuel burned in these units. Fuel analyses are not required for fuels used for only startup, unit shutdown, and transient flame stability purposes, or for natural gas, refinery gas, other gas 1 fuels, or fuels exempted in 40 CFR 63.7510(a)(2)(i) or (ii). 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. 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 analysis must be conducted for Cl and Hg, and for TSM if opting to comply with the TSM alternative. 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):

i. 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):

(a) 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;

(b) 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);

(c) 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; and

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

ii. 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):

(a) 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;

(b) during the performance testing for Hg, the fraction of the total heat input for each fuel type burned (Q_i) 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 (HG_i);

(c) 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; and

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

iii. 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):

(a) 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;

(b) during the performance testing for TSM, the fraction of the total heat input for each fuel type burned (Q_i) 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 (TSM_i);

(c) 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; and

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]

b. 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). For gaseous fuels, fuel analysis cannot be used for compliance with the HCl or TSM standards. 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 (including the use of equivalent methods as defined in 40 CFR 63.7575). 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. 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 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. Compliance is demonstrated by maintaining the rolling 12-month average emissions, established through the monthly fuel analyses, 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:

i. 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);

ii. 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; and

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.

iii. 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; and

1.028 = molecular weight ratio of HCl to Cl.

iv. 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"; and

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

v. 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"; and

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]

c. Fuel samples must be collected according to the procedures in 40 CFR 63.7521(c), or the methods listed in Table 6 of Subpart DDDDD, or using an automated sampling mechanism that provides representative composite fuel samples for each fuel type that includes both coarse and fine materials.

i. If collecting samples according to 40 CFR 63.7521(c), samples shall be collected as follows:

(a) 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.

(b) 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.

(c) 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.

(d) 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)]

g) Miscellaneous Requirements

(1) None.

4. Emissions Unit Group -Stoker Coal Boilers: B005 and B006

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

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	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, Commercial, and Institutional Boilers and Process Heaters. (applicability 40 CFR 63.7485; affected source, 40 CFR 63.7490)	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 as identified in: Table 2 for existing units:* **1. For units combusting at least 10% coal and < 10% biomass on an annual heat input basis:** <u>PM</u>† 0.040 lb of filterable particulate matter (PM)/MMBtu of heat input; or 5.3 E-05 lb of Total Selected Metals (TSM)/MMBtu of heat input; or 0.042 lb of PM/MMBtu of steam output; or 0.49 lb of PM/MWh; or 5.6E -05 lb of TSM/ MMBtu of steam output; or 6.5E -04 lb of TSM/MWh; and <u>HCl</u>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.022 lb of hydrogen chloride (HCl)/MMBtu of heat input; or 0.025 lb HCl/MMBtu of steam output; or 0.27 lb HCl/MWh and <u>Hg</u> 5.7 E-06 lb of mercury (Hg)/MMBtu of heat input; or 6.4E-06 lb Hg/MMBtu of steam output or; 7.3E-05 lb Hg/MWh and <u>CO</u> 160 ppm carbon monoxide (CO) by volume on a dry basis, corrected to 3% O_2, 3-run average; or 0.14 lb CO/MMBtu of steam output, 3-run average; or 1.7 lb CO/MWh, 3-run average; or 340 ppm CO by volume on a dry basis, corrected to 3% O_2, as a 30-day rolling average, if using CEMS. **2. For units combusting at least 10% biomass on an annual heat input basis:** PM 0.32 lb of filterable PM/MMBtu of heat input; or 4.0 E-03 lb of TSM/MMBtu of heat input; or 0.37 lb of PM/MMBtu of steam output; or 4.5 lb of PM/MWh; or 4.6E -03 lb of TSM/ MMBtu of steam output; or 5.6E -02 lb of TSM/MWh; and <u>HCl</u> 0.022 lb of HCl/MMBtu of heat input; or

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.025 lb of HCl/MMBtu of steam output; or 0.27 lb HCl/MWh; and <u>Hg</u> 5.7 E -06 lb of Hg/MMBtu of heat input; or 6.4E -06 lb of Hg/MMBtu of steam output; or 7.3E -05 lb Hg/MWh; and <u>CO</u> 460 ppm CO by volume on a dry basis, corrected to 3% O_2, 3-run average; or 0.42 lb CO/MMBtu of steam output, 3-run average; or 5.1 lb CO/MWh, 3-run average; or 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 combusting only Gas 1 fuels (except as allowed by rule) and limited-use boilers, as those terms are defined in 40 CFR 63.7575, are not subject to emission standards and shall meet the tune-up requirements identified in Table 3 as applicable to the unit.
b.	OAC rule 3745-31-05(A) (PTI 02-2370)	Particulate emissions shall not exceed 0.10 lb/mmBtu of actual heat input. The PM emission limitation specified by this rule is less stringent than the PM emission limitation established pursuant to 40 CFR Part 63, Subpart DDDDD.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule. The visible emissions limitation specified

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		in this rule is less stringent than the visible emissions limitation established pursuant to 40 CFR Part 63, Subpart DDDDD, Table 4, Line #4.
d.	OAC rule 3745-17-10(C)	Particulate emissions shall not exceed 0.17 lb/MMBtu of actual heat input. The particulate emission limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A).
e.	OAC rule 3745-18-91(E)	Sulfur dioxide emissions shall not exceed 7.0 lbs/MMBtu of actual heat input.
f.	40 CFR Part 64, Compliance Assurance Monitoring (CAM) Rule	See d)(3). 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.
g.	OAC rule 3745-110-03	The requirements of the NOx RACT rule are not applicable to this source as it is located in Wayne County, which is not one of the counties listed in OAC rule 3745-110-02(A)(1).

*The emission limits contained in this permit assume that the permittee will combust only coal, dry biomass, and Gas 1 fuels. If the permittee combusts any other fuels in these units that causes the boiler(s) to become subject to a different subcategory, the permittee shall comply with the applicable emission limits for the new subcategory instead of the emission limits presented in the table above.

† These emission limits are based on a 30-day rolling average if the boiler has an annual average heat input rate > 250 MMBtu/hr from coal/solid fossil fuel, and must install either PM CPMS or PM CEMS per 40 CFR 63.7525(b).

(2) Additional Terms and Conditions

a. At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

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

b. Except for existing units demonstrating compliance through emissions averaging (40 CFR 63.7522), each existing boiler subject to 40 CFR 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 specified in 40 CFR 63.7495.

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

c. 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 180 days after the compliance date specified in 40 CFR 63.7495, or no later than 180 days after re-start of a boiler that was not operated between the effective date of Part 63 Subpart DDDDD and the compliance date, or that has not operated for over a year following the last compliance demonstration.

[Authority for term: 40 CFR 63.7510(e) and (j), 40 CFR 63.7515(g), 40 CFR 63.7495(b), and 40 CFR 63.7(a)(2)]

d. For each existing boiler other than limited use units, a one-time energy assessment must be performed by a qualified energy assessor no later than the compliance date specified in 40 CFR 63.7495. The one-time energy assessment for existing units must include the following, but need not exceed the number of technical hours provided for the energy assessment in 40 CFR 63.7575:

i. a visual inspection of the boiler system;

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

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

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

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

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

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

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

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

e. An initial tune-up must be completed for existing units no later than the compliance date specified in 40 CFR 63.7495, unless the boiler is not in operation at that time, where a tune-up must be completed within 30 days after the re-start of the boiler. Following the initial compliance date, tune-ups must be conducted for each boiler within the applicable annual, biennial, or 5-year schedule as specified in 40 CFR 63.7500(a)-(e), 40 CFR 63.7540(a)(10) through (13), and Table 3 to the subpart, unless alternative work practice standards are approved pursuant to 40 CFR 63.6(g). Each subsequent annual tune-up must occur no more than 13 months after the previous tune-up; each biennial tune-up must be conducted no more than 25 months after the previous tune-up; and each 5-year tune-up must be completed no more than 61 months after the previous tune-up. If the boiler is not in operation at the time of its scheduled tune-up, the permittee is not required to perform the tune-up at that time but must complete the tune-up within 30 days after the re-start of the boiler. Units that produce electricity for sale may delay the inspection until the first outage, but may not exceed 36 months from the previous inspection. The frequency of tune-ups shall be based on the frequency identified in Table 3 to the subpart.

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

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

ii. inspection of the flame pattern and requirement to adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications if applicable;

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

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

v. measure the concentration of CO (in ppm, by volume) and oxygen (in volume percent) in the effluent gas stream, at the high-fire or typical operating load, and both before and after any adjustments (measurements can be make using a portable CO analyzer);

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

vii. where more than one type of fuel is used, records of the type and amount of each fuel type burned over the 12 months prior to the tune-up.

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

f. 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 40 CFR 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).

[Authority for term: 40 CFR 63.7505(a) and (c), 40 CFR 63.7500(f), and 40 CFR 63.7540(d)]

g. 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 (including the use of equivalent methods as defined in 40 CFR 63.7575). For gaseous fuels, fuel analysis cannot be used for compliance with the HCl or TSM standards.

[Authority for term: 40 CFR 63.7505(c) and 40 CFR Part 63, Subpart DDDDD Table 6]

h. 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.

[Authority for term: 40 CFR 63.7540(a)(1) and 40 CFR Part 63, Subpart DDDDD Table 8]

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

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

c) Operational Restrictions

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

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

(2) For boilers demonstrating compliance using a BLDS, the alarm may not sound more than 5% of the operating time during each 6-month period. Corrective action(s) must be initiated within 1 hour of an alarm and completed as soon as practicable.

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

(3) For boilers demonstrating compliance using a PM CPMS, you must establish the PM CPMS operating limit 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 or at the PM CPMS output value corresponding to 75 percent of the emission limit if your PM performance test demonstrates compliance below 75 percent of the emission limit. Compliance shall be based on the arithmetic 30-day rolling average of all the hourly average quality-assured PM CPMS output data, recorded in milliamps, collected during all boiler operating hours and updated at the end of each new boiler operating hour. The 30-day average shall be calculated using Equation 14 of Subpart DDDDD of Part 63. The Method 5 performance test shall be repeated during each required performance test to reassess and adjust the site-specific operating limit for the PM CPMS in accordance with the results of the performance test.

For any deviation of the 30-day rolling PM CPMS average value from the established operating parameter limit, you must:

a. Within 48 hours of the deviation, visually inspect the air pollution control device (APCD).

b. If inspection of the APCD identifies the cause of the deviation, take corrective action as soon as possible and return the PM CPMS measurement to within the established value.

c. Within 30 days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the CPMS operating limit. You are not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this paragraph.

PM CPMS deviations from the operating limit leading to more than four required performance tests in a 12-month operating period constitute a separate deviation.

[Authority for term: 40 CFR 63.7515(b), 40 CFR 63.7530(b)(4)(ii), 40 CFR 63.7540(a)(18), and 40 CFR Part 63, Subpart DDDDD Table 8 #2]

(4) For boilers demonstrating compliance with PM limits using a wet scrubber, you must 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 the lowest one-hour average liquid flow rate, respectively, measured during the most recent performance test demonstrating compliance with the PM emission limitation according to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD of Part 63.

[Authority for term: 40 CFR 63.7530(b), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 4 #1, 7 #1, and 8 #4]

(5) For boilers demonstrating compliance with the HCl limit using a wet acid gas scrubber, you must maintain the 30-day rolling average effluent pH at or above the lowest one-hour average pH and the 30-day rolling average liquid flow rate at or above the lowest one-hour average liquid flow rate measured during the most recent performance test demonstrating compliance with the HCl emission limitation according to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD of Part 63. If you use a wet scrubber and you conduct separate performance tests for HCl and mercury emissions, you must establish one set of minimum scrubber effluent pH and liquid flow rate operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flow rate operating limit at the higher of the minimum values established during the performance tests.

[Authority for term: 40 CFR 63.7530(b), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 4 #2, 7 #2, and 8 #4-#5]

(6) For boilers demonstrating compliance with an electrostatic precipitator (ESP) operating with a wet scrubber and not using a PM CPMS or PM CEMS, you must maintain the 30-day rolling average total secondary electric power input of the ESP at or above the operating limits established during the three-run performance test demonstrating compliance according to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD of Part 63.

[Authority for term: 40 CFR 63.7530(b), and 40 CFR Part 63, Subpart DDDDD, Table 4 #4, 7 #1, and 8 #7]

(7) For boilers demonstrating compliance using a dry control electrostatic precipitator (ESP) that are not using a PM CPMS or PM CEMS to demonstrate compliance, the opacity shall be maintained at less than or equal to 10% as a daily block average.

[Authority for term: 40 CFR 63.7530(b), 40 CFR Part 63, Subpart DDDDD, Table 4 #4 and 8 #1]

(8) For boilers demonstrating compliance with the HCl emission limits using a dry scrubber, you must maintain the 30-day rolling average sorbent injection rate at or above the lowest one-hour average injection rate measured during the three-run performance test demonstrating compliance with the HCl emission limitation according to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD of 40 CFR Part 63. When the unit operates at lower loads, the sorbent injection rate shall be multiplied by the load fraction to determine the required injection rate. If different acid gas sorbents are used during the HCl performance test, the average value for each sorbent becomes the site-specific operating limit for that sorbent.

[Authority for term: 40 CFR 63.7530(b), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 4 #5, 7 #2, and 8 #6]

(9) For boilers demonstrating compliance with the Hg emission limits using activated carbon injection, you must maintain the 30-day rolling average carbon injection rate at or above

the lowest one-hour average injection rate measured during the three-run performance test demonstrating compliance with the Hg emission limitation according to 40 CFR 63.7530(b) and Table 7 of Subpart DDDDD of Part 63. When the unit operates at lower loads, the carbon injection rate shall be multiplied by the load fraction to determine the required injection rate.

[Authority for term: 40 CFR 63.7530(b), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 4 #5, 7 #3, and 8 #6]

(10) For boilers demonstrating compliance with the CO emission limit using an oxygen analyzer system that is not an oxygen trim system, you must maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen concentration measured during the most recent CO performance test, as specified in Table 8 of Subpart DDDDD of Part 63. Boilers demonstrating compliance with the CO limit using CO CEMS are not subject to an oxygen concentration operating limit.

[Authority for term: 40 CFR 63.7515(i), 40 CFR 63.7525(a), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 4 #9, 7 #4 and 8 #9]

(11) For boilers demonstrating compliance with the CO emission limit using an oxygen trim system, you must set the oxygen level no lower than the lowest hourly average oxygen concentration measured during the most recent CO performance test according to Table 7 of Subpart DDDDD of Part 63. Boilers demonstrating compliance with the CO limit using CO CEMS are not subject to an oxygen concentration operating limit.

[Authority for term: 40 CFR 63.7515(i), 40 CFR 63.7525(a), 40 CFR 63.7575, and 40 CFR Part 63, Subpart DDDDD, Table 7 #4]

(12) For boilers equipped with a wet scrubber or dry sorbent injection electing to demonstrate compliance with the HCl emission limits using an SO_2 CEMS, you must maintain the 30-day rolling average SO_2 CEMS emission rate at or below the highest hourly average SO_2 emission rate measured during the most recent HCl performance test demonstrating compliance with the HCl emission limitation according to 40 CFR 63.7530(b), 40 CFR 63.7525(m), and Table 8 of Subpart DDDDD of Part 63.

[40 CFR 63.7530(b)], [40 CFR 63.7530(i)] and [40 CFR Part 63, Subpart DDDDD, Table 4 #10, 7#2, and 8 #11]

(13) For boilers demonstrating compliance using performance testing, the operating load of each unit shall be maintained such that it does not exceed 110% of the highest hourly average operating load established during the most recent performance test demonstrating compliance, as specified in 40 CFR 7520(c) and Table 8 to Subpart DDDDD of Part 63.

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

(14) The permittee shall only burn fuel types and fuel mixtures that were used to demonstrate compliance with the applicable emissions limit.

a. All fuel types and mixtures of fuels burned must result in one of the following:

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

ii. lower fuel input of Cl, Hg, and TSM than the maximum values calculated during the last performance test, if demonstrating compliance through performance testing, unless new input limits are established according to 40 CFR 63.7540(a)(4),(6), and/or (16).

[Authority for term: 40 CFR 63.7540(a)(2)]

b. 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)]

c. 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)]

d) Monitoring and/or Record keeping Requirements

(1) The permittee shall maintain monthly records of the total quantity of coal received, and the results of the analyses for ash content, sulfur content, and heat content.

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

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods

for ash content, sulfur content and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM Method D5865, Gross Calorific Value of Coal and Coke, respectively. Alternative, equivalent methods may be used upon written approval from the Ohio EPA, Northeast District Office.

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

(2) The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.Each continuous monitoring system consists of all the equipment used to acquire data and includes the data recording/processing hardware and software.

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

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

If the permittee becomes subject to a particulate emission limit under 40 CFR Part 63, Subpart DDDDD, the monitoring and recordkeeping requirements specified in 40 CFR sections 63.7525 and 63.7535 will replace the monitoring and recordkeeping requirements of 40 CFR Part 64, and therefore, this provision will no longer apply after the compliance date in 40 CFR Part 63, Subpart DDDDD.

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

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

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

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

For emissions unit B005:

Parameter and Range

Secondary Current 50 – 500 milli-amps

Secondary Voltage 11 - 55 kilovolts

For emissions unit B006:

Parameter and Range

Secondary Current 50 – 500 milli-amps

Secondary Voltage 11 - 55 kilovolts

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

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

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements 40 CFR Part 63, Subpart DDDDD.

The monitoring requirements specified in 40 CFR sections 63.7525 and 63.7535 will replace the monitoring requirements of 40 CFR Part 64, and therefore, this provision will no longer apply after the compliance date in 40 CFR Part 63, Subpart DDDDD.

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

(4) To obtain an exemption pursuant to OAC rule 3745-17-07(A)(3)(a)(i) or (A)(3)(b)(i), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the ESP (a) during all periods of start-up until ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b) during all periods

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

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

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

(5) The permittee shall develop a site-specific fuel monitoring plan for each type of fuel burned in boilers that burn more than a single type of fuel for which the permittee elects to demonstrate compliance with any of the applicable emission limits in Table 2 through performance testing. For purposes of the fuel analysis requirements, boilers that use a supplemental fuel only for startup, shutdown, and transient flame stability purposes qualify as units that burn a single type of fuel and testing is not required for fuel burned in these units. Fuel analyses are not required for fuels used for only startup or shutdown, or for transient flame stability, or for natural gas, refinery gas, other gas 1 fuels, or fuels exempted in 40 CFR 63.7510(a)(2)(i) or (ii). The permittee shall also include in the site-specific fuel monitoring plan each fuel burned in a boiler for which the permittee chooses to demonstrate compliance with the any of the applicable emission limits in Table 2 through fuel analyses.

a. 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.

[Authority for term: 40 CFR 63.7521(a), (b), and (g), 40 CFR 63.7510(a)(2) and (b) and 40 CFR 63.7530(a)]

(6) 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/m^3 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/m^3 of Hg, semiannual sampling and analysis shall be conducted;

c. if any semi-annual fuel analyses demonstrates the Hg constituents to exceed 30 micrograms/m^3 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/m^3 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/m^3 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/m^3 of Hg but less than or equal to 30 micrograms/m^3 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/m^3 of Hg, no further sampling or fuel analysis is required; and

g. if the initial fuel analysis exceeds 40 micrograms/m^3 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 63.7521(g), 40 CFR 63.7540(c), 40 CFR 63.7530(g), and 40 CFR 63.7521(f) through (i)]

(7) For each CMS used to demonstrate compliance with 40 CFR Part 63, Subpart DDDDD (including CEMS, COMS, or CPMS), the permittee shall develop a site-specific monitoring plan. This requirement to develop and submit a site specific monitoring plan does not apply to existing CEMS or COMS operated according to the performance specifications under Appendix B to Part 60 of this chapter and that meet the requirements of §63.7525. The site-specific monitoring plan shall require all CMS (systems required by rule) be maintained in continuous operation during process operations, except as allowed by rule. Using the process described in §63.8(f)(4), you may request approval of alternative monitoring system quality assurance and quality control procedures in place of those specified in this paragraph and, if approved, include the alternatives in your site-specific monitoring plan.

a. 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 or other interface at a location that is representative of control 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), including at minimum a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit for any COMS;

v. ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);

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) (as applicable in Table 10 to 40 CFR Part 63, Subpart DDDDD), (e)(1), and (e)(2)(i).

(8) For each CMS used to demonstrate compliance with 40 CFR Part 63, Subpart DDDDD (including CEMS, COMS, or CPMS), the permittee shall develop a performance evaluation test plan. The performance evaluation test plan shall 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.

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

b. The external QA program shall include, at a minimum, provisions for systems audits that include the opportunity for on-site evaluation by Ohio EPA of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

All CMS shall be installed, operational, and the data verified, as specified in 40 CFR 63.7525, either prior to or in conjunction with conducting performance tests required under 40 CFR 63.7.

[Authority for term: 40 CFR 63.7505(d), 40 CFR 63.7525, and 40 CFR 63.8(d) and (e)]

(9) For sources demonstrating compliance using a dry electrostatic precipitator (ESP) that are not using a PM CPMS or PM CEMS to demonstrate compliance, a continuous opacity monitoring system (COMS) shall be installed, operated, and maintained according the procedures specified in 40 CFR 63.7525(c), the portions of 40 CFR 63.8 applicable through Table 10 40 CFR Part 63 Subpart DDDDD, the site-specific monitoring plan, 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 as specified in 40 CFR 63.8(c)(4)(i). 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. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, startup and shutdown periods, and downtime, all readings shall be used to calculate the daily block average.

[Authority for term: 40 CFR 63.7525(c), 40 CFR 63.7535, 40 CFR 63.7575, 40 CFR 63.8, and 40 CFR Part 63, Subpart DDDDD Table 8 #1]

(10) For a boiler equipped with fabric filter control and electing to demonstrate compliance using a bag leak detection system (BLDS), it shall be installed, calibrated, and maintained in accordance with 40 CFR 63.7525(j) as follows:

a. The bag leak detection sensor must be installed in a position that is representative of the relative or absolute PM loadings for each exhaust stack, roof vent, or compartment of the fabric filter.

b. A performance evaluation must be conducted in accordance with the monitoring plan and consistent with guidance provided in EPA-454/R-98-015.

c. The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter or less.

d. The BLDS must be equipped with a device to record continuously the output signal from the sensor.

e. The BLDS must alert plant operating personnel in an easily recognizable manner (i.e., sight or sound) when an increase in relative PM emissions are detected over a preset level (alert set point). The BLDS instrumentation and alert may be shared among multiple bag leak detectors.

f. The BLDS must be continuously operated while the boiler is operating.

[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 Table 8 #3]

(11) Each boiler in the subcategories designed to burn coal/solid fuels or heavy liquid fuels and having an annual average heat input greater than 250 MMBtu per hour from solid fossil fuels or heavy liquid fuels and demonstrating compliance with the PM limit must be equipped with either a PM CPMS or PM CEMS.

a. If choosing to install the PM 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.

i. The operating principle of the PM CPMS must be based on in-stack or extractive light scatter, light scintillation, beta attenuation, or mass accumulation detection of PM in the exhaust gas or representative exhaust gas sample. 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. 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 PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to at least two times your allowable emission limit.

ii. An initial performance evaluation for the PM CPMS shall be conducted no later than 180 days after the compliance date specified in 40 CFR 63.7495. The evaluation shall be conducted according to the applicable requirements of 40 CFR 60.8(e) and Performance Specification 11 at 40 CFR Part 60, Appendix B.

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

(12) If demonstrating compliance using a wet PM scrubber, the scrubber shall be equipped with CPMS to measure the pressure drop and liquid flow rate. The CPMS shall be installed, operated, and maintained according to 40 CFR 63.7525(d). 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, one representing each of the four 15-minute periods in an hour, for each valid hour of data. Except for

data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average pressure drop and liquid flow rate for each operating day.

[Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d), 40 CFR Part 63.7535, 40 CFR 63.7575 and 40 CFR Part 63, Subpart DDDDD Tables 7 #1 and 8 #4]

(13) If demonstrating compliance using a wet acid gas (HCl) scrubber, the scrubber shall be equipped with CPMS to measure the effluent pH and liquid flow rate. The CPMS shall be installed, operated, and maintained according to 40 CFR 63.7525(d). 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, one representing each of the four 15-minute periods in an hour, for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average pH and liquid flow rate for each operating day.

[Authority for term: 40 CFR 63.7530(b)(4)(i), 40 CFR 63.7525(d), 40 CFR Part 63.7535, 40 CFR 63.7575 and 40 CFR Part 63, Subpart DDDDD Tables 7 #2 and 8 #5]

(14) If you demonstrate compliance using an electrostatic precipitator (ESP) operating with a wet scrubber and are not using a PM CPMS or PM CEMS to demonstrate compliance, the ESP shall be equipped with a CPMS to measure the total secondary electric power input (voltage and current) to the precipitator collection plates. The CPMS shall be installed, operated, and maintained according to 40 CFR 63.7525(d). 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, one representing each of the four 15-minute periods in an hour, for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average total secondary electric power input for each operating day.

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

(15) If you demonstrate compliance with the HCl emission limitation using a dry scrubber and do not use an HCl CEMS to demonstrate compliance, the scrubber shall be equipped with a CPMS to measure the sorbent injection rate. The CPMS shall be installed, operated, and maintained according to 40 CFR 63.7525(d). 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, one representing each of the four 15-minute periods in an hour, for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average sorbent injection rate for each operating day.

[Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d), 40 CFR 63.7535, 40 CFR 63.7575 and 40 CFR Part 63, Subpart DDDDD Tables 7 #2 and 8 #6]

(16) If you demonstrate compliance with the Hg emission limitation using a dry scrubber and do not use an Hg CEMS to demonstrate compliance, the scrubber shall be equipped with a CPMS to measure the activated carbon injection rate. The CPMS shall be installed, operated, and maintained according to 40 CFR 63.7525(d). 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, one representing each of the four 15-minute periods in an hour, for one valid hour of data. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average carbon injection rate for each operating day.

[Authority for term: 40 CFR 63.7530(b)(4), 40 CFR 63.7525(d), 40 CFR 63.7535, 40 CFR 63.7575 and 40 CFR Part 63, Subpart DDDDD Tables 7 #3 and 8 #6]

(17) 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:

a. For boilers subject to a CO emission limit and using the option to install an oxygen analyzer system other than an oxygen trim system to demonstrate compliance, the oxygen analyzer system shall monitor the oxygen in the boiler flue gas at the outlet of the boiler 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 Table 8 #9]

b. For boilers subject to a CO emission limit and using the option to install a CEMS to demonstrate compliance, the CEMS shall meet the following requirements:

i. The CO CEMS shall be installed, certified, operated, and maintained in accordance with Performance Specification 4, 4A, or 4B of Part 60 Appendix B, 40 CFR 63.7525(a), 40 CFR 63.7540(a)(8), the site-specific monitoring plan ,and the applicable provisions of 40 CFR 63.8.

ii. The O2 CEMS shall be installed, certified, operated, and maintained in accordance Performance Specification 3 at 40 CFR Part 60, Appendix B, the site-specific monitoring plan, 40 CFR 63.7525(a), 63.7540(a)(8), and the applicable provisions of 40 CFR 63.8.

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

iv. The permittee shall conduct, or have conducted, performance evaluations of the CO CEMS on or before 180 days after the compliance date specified in 40 CFR 63.7495 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. 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.

v. 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.

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

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

viii. The CO and O2 CEMS data shall be collected concurrently at the outlet of the control device.

ix. The CEMS must complete a minimum of one cycle of CO and oxygen CEMS operation (sampling, analyzing, and data recording) for each successive 15-minute period. Collect at least four data values representing the four 15-minute periods in an hour,. At least two 15-minute data values must be collected during any hour when CEMS calibration, quality assurance, or maintenance activities are being performed.

x. CO and oxygen data must be collected concurrently at the outlet of the boiler(s) control device.

xi. 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, in accordance with Equation 19-19 in section 12.4.1 of Method 19 of 40 CFR Part 60, Appendix A-7. Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup/shutdown periods, all readings shall be used to calculate the 10-day or 30-day rolling average (as applicable) for each operating day.

xii. Carbon monoxide must be continuously monitored in accordance with 40 CFR 63.7525(a) and 40 CFR 63.7535.

[Authority for term: 40 CFR 63.7525(a), 40 CFR 63.7510(c), 40 CFR 63.7540(a)(8), and 40 CFR 63.8]

c. For boilers subject to a CO emission limit and using the option to install an oxygen trim system, the oxygen analyzer 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 Table 7 #4]

(18) 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 at the outlet of the boiler and downstream of all emission control devices, and must be installed, certified, operated, and maintained in accordance with 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 CEMS must be operated as specified in 40 CFR 63.7535(b). Except for data recorded during monitoring malfunctions, quality assurance activities, monitor repairs, out of control periods, and startup and shutdown periods, all readings shall be used to calculate the 30-day rolling average for each operating day. 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. The initial performance evaluation of the SO_2 CEMS for the existing boilers(s) shall be completed by no later than 180 days after the compliance date specified in 40 CFR 63.7495, 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 Table 8 #11]

(19) For boilers demonstrating compliance with emission limitations using performance testing, 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 7 #5 and Table 8 #10]

(20) 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 and compliance is required, except for periods of monitoring system malfunction, repairs, 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. Except for periods of monitoring system

malfunctions, repairs, and required quality assurance and quality control activities, failure to collect required data is a deviation from the monitoring requirements. 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),(d)]

(21) 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)]

(22) 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)]

(23) Each pH monitoring system used to demonstrate continuous compliance shall meet the following requirements.

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

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

c. 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

d. performance evaluations, including a 2-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit,, shall be conducted in accordance with the monitoring plan at the time of each performance test and no less frequently than quarterly.

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

(24) Each secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber used to demonstrate compliance with Subpart DDDDD shall meet the following requirements:

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

b. 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)]

(25) 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:

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

b. 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)]

(26) Where demonstrating compliance with the Hg standard using an Hg CEMS, the CEMS must be installed, certified, maintained, and operated in accordance with 40 CFR 63.7540(a)(14), Performance Specifications 6 and 12A of Part 60 Appendix Performance

Specifications 6 and 12A of Part 60, Appendix B and quality assurance procedure 6 of 40 CFR Part 60 Appendix F. Alternatively, a sorbent trap based integrated monitor may be installed and operated in accordance with Performance Specification 12B of Part 60 Appendix B. An initial performance evaluation of the Hg CEMS for the existing boiler(s) shall be completed by no later than 180 days after the compliance date specified in 40 CFR 63.7495, or no later than 180 days following the notification to the Director that Hg CEMS will be used for compliance. 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 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. for each day of operation, the hourly average Hg concentration data and stack gas volumetric flow rate data must be measured and recorded;

b. 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;

c. 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;

d. 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;

e. 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; and

f. 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)(14)]

(27) Where demonstrating compliance with the HCl standard using an HCl CEMS, the CEMS must be installed, certified, maintained, and operated in accordance with 40 CFR 63.7540(a)(15), the applicable performance specification in Part 60 Appendix B, and quality assurance procedure 6 of 40 CFR Part 60, Appendix F. The initial performance evaluation of the HCl CEMS for the existing boiler(s) shall be completed by no later than 180 days after the compliance date specified in 40 CFR 63.7495, or no later than 180 days following the notification to the Director that HCl CEMS will be used for compliance. 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.

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

b. 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;

c. 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;

d. 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;

e. 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; and

f. 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.

[Authority for term: 40 CFR 63.7510(b), 40 CFR 63.7525(l) and 40 CFR 63.7540(a)(15)]

(28) 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. A copy of the federally enforceable permit restricting the annual average capacity factor to no more than 10% shall also be retained.

[Authority for term: 40 CFR 63.7525(k), 40 CFR 63.7555(d)(3), and 40 CFR 63.7575]

(29) 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, according to the requirements in 40 CFR 63.10(b)(2)(xiv);

b. records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations of CMS as required in 40 CFR 63.10(b)(2)(viii);

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

i. records required under 40 CFR 63.10(b)(2)(vii) through (xi):

(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 and CMS performance evaluations;

(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 as required by 40 CFR 63.6(h)(7)(i) and (ii);

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, including all periods when a COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit), and the corrective actions taken to return the CMS to normal operation;

v. all 6-minute averages (and daily block averages as applicable) for COMS periods during which the COMS is not out of control.

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

vii. requests for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i);and

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

d. the date, time, and duration of each BLDS 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 conditions exist for an alarm. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alert time is counted. If corrective action is required, each alert shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alert time shall be counted as the actual amount of time taken to initiate corrective action.

e. the records required in Table 8 to the subpart, including records of all monitoring data and calculated averages for the applicable operating limits, such as opacity, pressure drop, pH, and operating load, and oxygen concentration of the exhaust stack, and

f. for each boiler subject to emission limits in Table 2 of the subpart, the following:

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

ii. 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:

(a) 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 241.3(d)(1);

(b) 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 241.2;

(c) if combusting a fuel that received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), a record that documents how the fuel satisfied the requirements of the petition process; and

(d) if combusting non-hazardous secondary materials as fuel per 40 CFR 241.4, records that document that the material is listed as a non-waste under 40 CFR 241.4(a);

iii. a copy of the calculations supporting documentation of the maximum Cl fuel input using Equation 7 of 40 CFR 63.7530(b), for sources that demonstrate compliance through performance testing; and if demonstrating compliance with the HCl emission limit through fuel analyses, a copy of all calculations and supporting documentation of the HCl emission rate using Equations 15 and 16 of 40 CFR 63.7530(c); supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCL emission rates (the results from one fuel analysis may be used for multiple boilers provided they are all burning the same fuel type and the chlorine fuel input or HCl emission rate is calculated for each boiler);

iv. a copy of the calculations supporting documentation of the maximum Hg fuel input using Equation 8 of 40 CFR 63.7530(b), for sources that demonstrate compliance through performance testing; and if demonstrating compliance with the Hg emission limit through fuel

analyses, a copy of all calculations and supporting documentation of the Hg emission rate using Equations 15 and 17 of 40 CFR 63.7530(c); supporting documentation should include results of any fuel analyses and basis for the estimates of maximum Hg fuel input or Hg emission rates (the results from one fuel analysis may be used for multiple boilers provided they are all burning the same fuel type and the Hg fuel input or Hg emission rate is calculated for each boiler);

v. a copy of the calculations supporting documentation of the maximum TSM fuel input using Equation 9 of 40 CFR 63.7530(b), for sources that demonstrate compliance through performance testing; and if demonstrating compliance with the TSM emission limit through fuel analyses, a copy of all calculations and supporting documentation of the TSM emission rates using Equations 15 and 18 of 40 CFR 63.7530(c); supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates (the results from one fuel analysis may be used for multiple boilers provided they are all burning the same fuel type and the Hg fuel input or Hg emission rate is calculated for each boiler);

vi. 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, including air pollution control equipment or fuel composition, that would cause relevant emissions increases, to qualify for less frequent than annual stack testing;

vii. the occurrence and duration of each malfunction of any subject boiler and/or the associated air pollution control and monitoring equipment;

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

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

g. 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;

h. if burning an alternative fuel in a boiler designed to burn gas 1 (subcategory) fuels, i.e., fuels other than natural gas, refinery gas, gaseous fuels subject to another subpart of Part 60, 61, 63, or 65, or other gas 1 fuel, the records of the total hours per calendar year that the alternative fuel was burned and the total hours per calendar year that the boiler operated during periods of gas curtailment or gas supply emergencies;

i. if electing to demonstrate compliance through emissions averaging for existing boilers, the averaging implementation plan required by 40 CFR 63.7522(g); 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 monitoring records; and after the first year, calculations for each rolling 12-months;

j. if electing to use efficiency credits from energy conservation measures to demonstrate compliance according to 40 CFR 7533, a copy of the Implementation Plan required in 40 CFR 63.7533(d) and all data and calculations used to establish the efficiency credits according to 40 CFR 63.7533(b), (c), and (f); and

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

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(c) and (d), 40 CFR 63.7540(a), 40 CFR 63.7555 and 40 CFR 63.7560, and 40 CFR 63, Subpart DDDDD Table 3 #5 and #6]

(30) 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.

[Authority for term: 40 CFR 63.7560]

e) Reporting Requirements

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

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

corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

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

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

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

(2) Quarterly reports shall be submitted concerning the quality and quantity of coal received for burning in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:

a. the total quantity of coal received (tons);

b. the average ash content (percent) of the coal received;

c. the average sulfur content (percent) of the coal received;

d. the average heat content (Btu/pound) of the coal received; and

e. the average sulfur dioxide emissions rate (pounds sulfur dioxide/MMBtu actual heat input) from the coal received.

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

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

(3) If you intend to use an alternative analytical method other than those required by Table 6 to Subpart DDDDD of 40 CFR Part 63, the site-specific fuel analyses plan must be submitted to the EPA Administrator (Region 5) no later than 60 days before the date of the intended initial compliance demonstration.

[Authority for term: 40 CFR 63.7560]40 CFR 63.7521(b)(2)]

(4) 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):

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

b. 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. 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 tests(s). The notification must describe in detail the proposed test methods and procedures, the monitored operating parameters, the time(s) and date(s) of the test(s); the notification must also include the site-specific test plan, the site-specific monitoring plan, and site-specific performance evaluation test plan, if requested;

c. the Initial Notification of Compliance shall be submitted according to 40 CFR 63.9(h)(2)(ii) and include all performance test and fuel analyses results completed to demonstrate compliance, as applicable; 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 according to 40 CFR 63.10(d)(2). Performance test results shall be signed by the person responsible for the test. The Initial Notification of Compliance Status report must contain the following information:

i. A description of the facility boilers including:

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

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

(c) a description of the add-on controls used on each boiler to comply with Subpart DDDDD;

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

(e) identification of fuel(s) that were determined to be 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 whether you 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; and

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;

(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; and

(d) if electing to demonstrate that a gaseous fuel meets the specifications of another gas 1 fuel, a certification that the initial fuel specification test meets the gas specification.

d. If the unit is in the subcategory designed to burn natural gas, refinery gas, or other gas 1 fuels, and there are plans to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of this part, Part 60, 61, or 65, or other gas 1 fuel during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, a notification of alternative fuel use must be submitted within 48 hours of the declaration of each period of natural gas curtailment or supply interruption. The notification must include the following information:

i. facility name and address;

ii. identification of the affected unit(s);

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

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

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

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

e. If there are any plans to commence or recommence combustion of solid waste, notification must be made at least 30 days prior to the date combustion of solid waste will commence or recommence. The notification must identify:

i. the name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that will commence burning solid waste, and the date of the notice;

ii. the currently applicable subcategories under this subpart;

iii. the date on which you became subject to the currently applicable emission limits; and

iv. the date upon which you will commence combusting solid waste.

f. if there has been a fuel switch or physical change to a boiler, and this fuel switch or change to the boiler has resulted in the applicability of a different subcategory, notification of the switch must be made within 30 days of the switch or change. This notification must identify:

i. the name of owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) that have switched fuels or were physically changed;

ii. the currently applicable subcategory of the boiler(s);

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

iv. the date of the notice.

[Authority for term: 40 CFR 63.7560, 40 CFR 63.7545, 40 CFR 63.7530(e), (f), and (g), and 40 CFR 63.9(b) through (h)]

(5) The permittee shall submit each applicable report in Table 9 to Part 63, Subpart DDDDD by the dates in Table 9. For boilers that are subject only to a requirement to conduct 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 that is specified for each boiler in 40 CFR 63.7495 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) after the specified compliance date. 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 (which must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31), 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 63.7560]40 CFR 63.7550(a),(b)]

(6) The compliance reports shall include the information identified in 40 CFR 63.7550(c)-(e). The Compliance Reports for 40 CFR Part 63, Subpart DDDDD must contain the following information as applicable for each boiler, as provided in 40 CFR 63.7550(c)(1)-(4):

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 verification that the operating limits have not changed or 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, scrubber pH, scrubber liquid flow rate, scrubber pressure drop), as applicable;

i. if qualifying for the less frequent than annual performance testing in accordance with 40 CFR 63.7515(b) or (c), 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, for sources that demonstrate compliance through performance testing; or

   ii. 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 any fuel specification analysis conducted according to §§ 63.7521(f) and 63.7530(g);

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 initial 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 does not exceed 40 micrograms/m^3 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 it was not done annually, biennially, or on a 5-year period, as applicable, and was 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 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 63.7525(b)(5)(iv), 40 CFR 63.7540(b), 40 CFR 63.7515(f), and 40 CFR Subpart DDDDD Tables 8 and 9]

(7) If using energy conservation credits to demonstrate compliance under 40 CFR 63.7533, documentation that the energy conservation measures implemented continue to generate the credit claimed.

[Authority for term: 40 CFR 63.7533(g)]

(8) 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) and reports required by Table 9 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 63.7525(b)(5)(iv), 40 CFR 63.7515(f)]

f) Testing Requirements

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

a. Emission Limitations:

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:

i. For boilers combusting at least 10% coal and <10% biomass on an annual heat input basis:

0.040 lb of filterable PM/MMBtu of heat input, or 0.042 lb filterable PM/MMBtu of steam output, or 0.49 lb filterable PM/MWh; or 5.3 E-05 lb TSM/MMBtu of heat input; or 5.6E -05 lb of TSM/ MMBtu of steam output; or 6.5E -04 lb TSM/MWh;

0.022 lb of HCl/MMBtu of heat input, or 0.025 lb HCl/MMBtu of steam output or 0.27 lb HCl/MWh;

5.7 E -06 lb of Hg/MMBtu of heat input, or 6.4 E -06 lb Hg/MMBtu of steam output or 7.3 E -05 lb Hg/MWh; and

130 ppm CO by volume on a dry basis, corrected to 3% O_2, 3-run average or 0.011 lb CO/MMBtu of steam output, 3-run average or 1.4 lb CO/MWh, 3-run average; or 320 ppm CO by volume on a dry basis, corrected to 3% O_2, as a 30-day rolling average calculated from 1-hour daily averages if using CEMS.

ii. For boilers combusting at least 10% biomass on an annual heat input basis:

0.051 lb of filterable PM/MMBtu of heat input, or 0.052 lb filterable PM/MMBtu of steam output, or 0.71 lb filterable PM/MWh, or 6.5 E-03 lb of TSM/MMBtu of heat input, or 6.6E -03 lb TSM/ MMBtu of steam output; or 9.1E -02 lb TSM/MWh;

0.022 lb of HCl/MMBtu of heat input or 0.025 lb HCl/MMBtu of steam output, or 0.27 lb HCl/MWh;

5.7 E -06 lb of Hg/MMBtu of heat input, or 6.4E -06 lb Hg/MMBtu of steam output, or 7.3E -05 lb Hg/MWh;

2400 ppm CO by volume on a dry basis, corrected to 3% O_2, 3-run average, or 1.9 lb CO/MMBtu of steam output, 3-run average, or 27 lb CO/MWh, 3-run average, or 2000 ppm CO by volume on a dry basis, corrected to 3% O_2, as a 10-day rolling average, if using CEMS.

Applicable Compliance Method:

Performance Testing

For existing boilers, the permittee shall conduct an initial performance test on or before the date 180 days after the date specified for compliance in 40 CFR 63.7495 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). Boilers equipped with CO and O_2 CEMS are exempt from the performance test requirements for CO and the oxygen concentration operating limit if meeting the requirements of 40 CFR 63.7525(a) and 40 CFR 63.7540(a)(8).

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.

Boilers demonstrating continuous compliance using CEMS or fuel analysis are not required to conduct subsequent performance tests.

Performance testing (initial or subsequent) is not required for boilers combusting gas 1 fuels, , where monthly records can document the fuel usage and that the boiler meets the definition of a unit designed to burn gas 1 in 40 CFR 63.7575. 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 permittee shall develop a site-specific test plan. The site-specific 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. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

iii. 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).

iv. The external QA program shall provide, at a minimum, for a test method performance audit during the performance test.

The performance audits shall consist of blind audit samples, provided by an accredited audit sample provider, in order to provide a measure of test data bias according to 40 CFR 63.7(c)(2)(iii);

The Director may request additional relevant information following the receipt and review of the site-specific test plan.

[Authority for term: 40 CFR 63.7(c)]

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 O_2 or CO_2 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 O_2 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)). The measured result for a multiple component analysis may include a combination of method detection level data and analytical data reported above the method detection level.

** 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 they 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 O_2 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.

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:

v. sampling ports adequate for the appropriate testing methods;

vi. safe sampling platform(s);

vii. safe access to sampling platform(s);

viii. utilities for sampling and testing equipment; and

ix. 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)]

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.

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 be conducted under the conditions specified in Tables 5 and 7, and must meet the minimum sampling times and volumes specified in the last column of Table 2 for existing boilers.

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. Efficiency credits may be used by sources demonstrating compliance with the emissions averaging provisions in 40 CFR 63.7522(e) and (f).

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 for each hour shall be computed using all of the 15-minute readings taken during each

performance test for each hour. The maximum operating load shall be calculated as the highest hourly average established during the most recent performance tests multiplied by 1.1 (110%).

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.

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:

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.

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 a performance test demonstrating compliance; and shall be established as the minimum operating parameter for the ESP.

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.

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 a performance test 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.

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 a performance test 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.

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 SO_2 CEMS, the permittee shall establish the unit-specific maximum SO_2 operating limit by continuously monitoring SO_2 and calculating the hourly average SO_2 emission rate during the most recent 3-run performance test for HCl. The maximum SO_2 operating limit shall be equal to the highest hourly average SO_2 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.

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

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.

Personnel from the Ohio EPA Northeast District Office, 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 control equipment.

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 Ohio EPA Northeast District Office 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.

[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 rule 3745-110, and OAC rule 3745-15-04(A)]

(2) Emissions Averaging

a. For existing boilers, the permittee may elect to use emissions averaging to demonstrate compliance with the emission limits for PM (TSM), HCl, or Hg, provided the boilers will be burning the same fuel and/or are in the same subcategory, as identified in 40 CFR 63.7499 and as allowed in 40 CFR 63.7522(b). The boilers in an emissions averaging group for which each boiler is vented to a different stack shall meet the following requirements and their average emissions calculated as follows:

i. for each boiler in the averaging group, the emission rate achieved during the initial compliance test (for the HAP or HAP surrogate being averaged) shall not exceed the emission level that was achieved on 1/31/13; or the control technology employed during the initial compliance test shall not be less effective for the HAP/surrogate being averaged than the control technology employed on 1/31/13;

ii. initial compliance shall be demonstrated using the maximum rated heat input capacity or maximum steam generation capacity of each boiler and the results of the initial performance test or fuel analyses;

iii. to demonstrate initial compliance, the averaged emissions from the boilers shall not exceed 90% of the applicable emission limit(s) identified

in Table 2 of Part 63 Subpart DDDDD and the averaged emissions shall be calculated as follows:

(a) Where complying with the emission limits on a heat input basis, Equation 1a (from 40 CFR 63.7522(e)(1)) shall be used to calculate the average weighted emissions of PM or TSM, HCl, and/or Hg. The weighted average emissions times the discount factor of 1.1, shall not exceed the emission limitation for the same HAP/surrogate identified in Table 2 to this subpart:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times Hm) \div \sum_{i=1}^{n} Hm$$

where:

Avg. Weighted Emissions = average weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant per MMBtu of heat input;

Er = emission rate, as determined during the initial or subsequent compliance demonstrations for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for unit "i", in lbs of pollutant/MMBtu;

Hm = maximum rated heat input capacity of unit, "i", in MMBtu/hour;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(b) Where complying with the emission limits on a steam generation output basis. Equation 1b (from 40 CFR 63.7522(e)(1)) shall be used to calculate the average weighted emissions of PM or TSM, HCl, and/or Hg. The weighted average emissions times the discount factor of 1.1 shall not exceed the emission limitation for the same HAP/surrogate identified in Table 2 to this subpart:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times So) \div \sum_{i=1}^{n} So$$

where:

Avg. Weighted Emissions = average weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant per MMBtu of steam output;

Er = emission rate, as determined during the initial compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for unit "i", in lbs of pollutant/MMBtu steam output; *****

So = maximum steam output capacity of unit, "i", in MMBtu/hour;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(c) Where complying with the emission limits on an electrical generation output basis, Equation 1c (from 40 CFR 63.7522(e)(1)) shall be used to calculate the average weighted emissions of PM or TSM, HCl, and/or Hg. The weighted average emissions times the discount factor of 1.1, shall not exceed the emission limitation for the same HAP/surrogate identified in Table 2 to this subpart:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times Eo) \div \sum_{i=1}^{n} Eo$$

where:

Avg. Weighted Emissions = average weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant per megawatt hour (lbs/MWh);

Er = emission rate, as determined during the initial compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM, derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for unit "i", in lbs of pollutant/MWh; *****

Eo = maximum electric generating output capacity of unit, "i", in MWh;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(d) Where the maximum rated heat input capacity of one or more steam generating boilers cannot be determined, Equation 2 (from 40 CFR 63.7522(e)(2)) can be used in place of Equation 1a, to calculate the average weighted emissions of PM or TSM, HCl, and/or Hg based on heat input using a conversion factor to calculate the heat input per pounds of steam generated. The weighted average emissions times the discount factor of 1.1 shall not exceed the emission limitation for the same HAP/surrogate identified in Table 2 to this subpart:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times Sm \times Cf_i) \div \sum_{i=1}^{n} Sm \times Cf_i$$

where:

Avg. Weighted Emissions = average weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant per MMBtu of heat input;

Er = emission rate, as determined during the most recent compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM, derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for boiler "i", in lbs of pollutant/MMBtu of heat input;

Sm = maximum steam generation by boiler, "i", in lbs/hour;

Cf_i = conversion factor, calculated from the most recent compliance test, in million Btu of heat input per pounds of steam generated for unit, I;

n = number of existing boilers participating in the emissions averaging option; and

1.1 = the required discount factor.

iv. Continuous compliance with the emission limits in Table 2 shall be demonstrated on a monthly basis, determined at the end of every month (12 times per year) using the heat input, steam generation output, or electric generation output of each boiler. The first monthly period begins on the compliance date specified in 40 CFR 63.7495 If the affected source elects to collect monthly data for up to the 11 months preceding the first monthly period, these additional data points can be used to compute the 12-month rolling average in 40 CFR 63.7522(f)(3) of this section.

(a) Where complying with the emission limits on an heat input basis, for each calendar month Equation 3a (from 40 CFR 63.7522(f)(1))

shall be used to calculate the monthly average-weighted emissions based on the heat input for the existing boilers participating in the emissions averaging option:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times Hb) \div \sum_{i=1}^{n} Hb$$

where:

Avg. Weighted Emissions = average-weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant/MMBtu of heat input, for the calendar month;

Er = emission rate, as determined during the most recent compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for unit, "i", in lbs of pollutant/MMBtu;

Hb = the actual heat input for the calendar month for unit, "i", in MMBtu;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(b) Where complying with the emission limits on a steam generation output basis, for each calendar month Equation 3b (from 40 CFR 63.7522(f)(1)) shall be used to calculate the monthly average-weighted emissions based on steam generation output for the existing boilers participating in the emissions averaging option:

$$\text{Avg. Wt. Emissions} = 1.1 \sum_{i=1}^{n} (Er \times So) \div \sum_{i=1}^{n} So$$

where:

Avg. Weighted Emissions = average-weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant/MMBtu of steam output, for the calendar month;

Er = emission rate, as determined during the most recent compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and

calculated according to 40 CFR 63.7530(c)) for unit, "i", in lbs of pollutant/MMBtu of steam output;

So = the steam output for the calendar month for unit, "i", in MMBtu;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(c) Where complying with the emission limits on an electricity generation output basis, for each calendar month Equation 3c (from 40 CFR 63.7522(f)(1)) shall be used to calculate the monthly average-weighted emissions based on electrical generation output for the existing boilers participating in the emissions averaging option:

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1}^{n} (Er \times Eo) \div \sum_{i=1}^{n} Eo$$

where:

Avg. Weighted Emissions = average-weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant/MWh for the calendar month;

Er = emission rate, as determined during the most recent compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for unit, "i", in lbs of pollutant/MWh;

Eo = the electric generating output for the calendar month for unit, "i", in MWh;

n = number of existing boilers (units) participating in the emissions averaging option; and

1.1 = the required discount factor.

(d) For each calendar month where the heat input of one or more boilers cannot be determined, Equation 4 (from 40 CFR 63.7522(f)(2)) can be used in place of Equation 3a to calculate the monthly average-weighted emissions based on heat input using a conversion factor to calculate the heat input per pounds of steam generated:

n n

$$\text{Avg.Wt.Emissions} = 1.1 \sum_{i=1} (Er \times Sa \times Cf_i) \div \sum_{i=1} (Sa \times Cf_i)$$

where:

Avg. Weighted Emissions = monthly, average-weighted emissions for PM or TSM, HCl, or Hg, in pounds of pollutant/MMBtu of heat input;

Er = emission rate, as determined during the most recent compliance demonstration for PM or TSM, HCl, or Hg, from the performance testing results (using the appropriate Methods from Table 5 to the subpart); **or** for HCl, Hg, or TSM derived from fuel analyses results (using methods/procedures found in Table 6 and calculated according to 40 CFR 63.7530(c)) for boiler, "i", in lbs of pollutant/MMBtu;

Sa = actual steam generation for the calendar month for boiler, "i", in pounds;

Cf_i = conversion factor, as calculated during the most recent compliance test, in MMBtu of heat input per pounds of steam generated for boiler, I;

n = number of existing boilers participating in the emissions averaging option; and

1.1 = the required discount factor.

***** If taking credit for energy conservation measures from a boiler, the emission level for that boiler may be adjusted (E_{adj}) in accordance with 40 CFR 63.7533.

[Authority for term: 40 CFR 63.7522]

v. Following the first 12 months of the compliance period (or the first 12 months of data collection, if the permittee elects to collect data prior to the compliance date), the rolling, 12-month average emission rate(s) shall be calculated using the monthly weighted-average emission rates from each month, as calculated above, using Equation 5 from 40 CFR 63.7522 as follows:

$$E_{avg} = \sum_{i=1}^{n} ER_i \div 12$$

where:

E_{avg} = rolling, 12-month, average emission rate, in lbs/MMBtu heat input, lbs/MMBtu of steam output, or lbs/MWh; and

ER_i = monthly weighted average emission rate, for month "i", in lbs/MMBtu heat input, lbs/MMBtu of steam output, or lbs/MWh, as calculated using Equations 3a, 3b, 3c, or 4 for each month's "Ave Weighted Emissions".

Compliance is demonstrated each month if the rolling, 12-month, average emission rate from the existing boilers does not exceed 90% of the applicable limit in Table 2 to the subpart for the averaging pollutant(s).

[Authority for term: 40 CFR 63.7522]

vi. No later than 180 days before the date of an intended compliance demonstration based on emissions averaging, the permittee shall submit, upon request, an implementation plan for emission averaging to the appropriate district or local office of the Ohio EPA, Division of Air Pollution Control. The implementation plan shall include the following information for the boilers in each averaging group:

(a) the identification of all existing boilers in the/each averaging group;

(b) the subcategory of each averaging group as identified in 40 CFR 63.7499 or 63.7522(b);

(c) which of the pollutant emissions will be averaged, PM, TSM, HCl, and/or Hg;

(d) for each boiler in the averaging group, either the applicable HAP emission level or the control technology installed as of 1/31/13;

(e) the date on which compliance using emission averaging is to commence;

(f) the process parameter (heat input or steam generated) that will be monitored for each averaging group;

(g) the specific control technology or pollution prevention measure to be used for each boiler in the averaging group and the date of its installation or application, and if the pollution prevention measure reduces or eliminates emissions from multiple boilers, identify each boiler;

(h) the test plan for the measurement of PM or TSM, HCl, or Hg emissions in accordance with the requirements in 40 CFR 63.7520, i.e., to be included in the site-specific test plan;

(i) the operating parameters to be monitored for each control system or device consistent with 63.7500 and Table 4 and a description of how the operating limits will be determined;

(j) if requesting to monitor an alternative operating parameter pursuant to § 63.7525, the following:

(i) a description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s);

(ii) a description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and record keeping requirements; and a demonstration, to the satisfaction of the Administrator, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(k) a demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating load conditions.

[Authority for term: 40 CFR 63.7522(g)(1) and (2) and 40 CFR 63.63.7(c)]

vii. Following the compliance date specified in 40 CFR 63.7495, the permittee using emissions averaging for any subcategory of existing boilers, shall demonstrate compliance on a continuous basis by meeting the following requirements:

(a) for each calendar month, demonstrate compliance with the average-weighted emissions from the boilers in the averaging group, calculated in accordance with 40 CFR 63.7522(f) and (g);

(i) for each existing boiler participating in the emissions averaging option that is equipped with a dry control system that is subject to an opacity limit and not vented to a common stack, maintain opacity at or below the applicable limit;

(ii) for each group of units participating in the emission averaging option where each unit in the group is equipped with a dry control system that is subject to an opacity limit and vented to a common stack that does not receive emissions from non-affected units, maintain opacity at or below the applicable limit at the common stack;

(iii) for each existing boiler participating in the emissions averaging option that is equipped with a wet scrubber, the 30-day rolling average parameter values shall be maintained at or above the operating limits established during the most recent performance test; and

(iv) for each existing boiler participating in the emissions averaging option that is venting to a common stack containing affected units from other subcategories, the appropriate operating limits for each unit shall be maintained as specified in Table 4 to Subpart DDDDD.

Any instance where the permittee fails to comply with the continuous monitoring requirements above is a deviation from the requirements of Subpart DDDDD.

[Authority for term: 40 CFR 63.7541]

If demonstrating compliance through performance testing, annual performance testing shall be conducted for each pollutant (PM or TSM, HCl, or Hg) for which compliance is demonstrated through emissions averaging. Each performance test must be completed no more than 13 months following the previous performance test for each existing boiler participating in emissions averaging within the subcategory.

[Authority for term: 40 CFR 63.7515(a) and (c)]

viii. For a group of two or more existing affected units, each of which vents through a single common stack, you may average PM (or TSM), HCl, or Hg emissions to demonstrate compliance with the limits for that pollutant in Table 2 to this subpart if you satisfy the following:

(a) For a group of two or more existing units in the same subcategories, each of which vents through a common emissions control system to a common stack, that does not receive emissions from units in other subcategories or categories, you may treat such averaging group as a single existing unit for purposes of this subpart and comply with the requirements of this subpart as if the group were a single unit.

(b) For all other groups subject to the common stack requirements of 40 CFR 63.7522(h), including situations where the exhaust of affected units are each individually controlled and then sent to a common stack, the owner or operator may elect to:

(i) Conduct performance tests according to procedures specified in § 63.7520 in the common stack if affected units from other subcategories vent through a common stack. The emission limit for the stack shall be calculated using Equation 6 from 40 CFR 63.7522(j)(1), where the summation of the emission limits from Table 2 for the individual units is divided by the summation of the heat input from each unit sharing the stack:

$$En = \sum_{i=1}^{n} = (Eli \times Hi) / \sum_{i=1}^{n} Hi$$

where:

En = HAP emission limit, in lbs/MMBtu, ppm, or nanograms/dscm (ng/dscm);

Eli = Appropriate emission limit from Table 2 to the subpart for unit i, in lb/MMBtu, ppm, or ng/dscm; and

Hi = heat input form unit i, in MMBtu.

(ii) Conduct performance tests according to procedures specified in § 63.7520 in the common stack. If non-affected units vent to the common stack, the non-affected units must be shut down or vented to a different stack during the performance test unless the faculty determines to demonstrate compliance with the non-affected units venting to the stack; and

(iii) Meet the applicable operating limit specified in § 63.7540 and Table 8 to this subpart for each emission control system (except that, if each unit venting to the common stack has an applicable opacity operating limit, then a single continuous opacity monitoring system may be located in the common stack instead of in each duct to the common stack)

(c) Where a group of 2 or more existing boilers in the same subcategories vent through a common stack, the common stack may be treated as a separate stack for purposes of 40 CFR 63.7522(b) and included in an emissions averaging group.

[Authority for term: 40 CFR 63.7522(h)-(k)]

(3) CEMS

a. If using an Hg CEMS to demonstrate compliance, compliance with the applicable emission limit in Table 2 shall be demonstrated on a 30-day rolling average basis, defined in 40 CFR 63.7575 as the arithmetic mean of the previous 720 hours of valid operating data. Valid operating data excludes periods of startup and shutdown, periods when the unit is not operating, data collected during malfunctions, out of control periods, repairs, and required quality assurance or quality control activities.

b. If using an HCl CEMS to demonstrate compliance, compliance with the applicable emission limit in Table 2 shall be demonstrated on a 30-day rolling average basis, defined in 40 CFR 63.7575 as the arithmetic mean of the previous 720 hours of valid operating data. Valid operating data excludes periods of

startup and shutdown, periods when the unit is not operating, data collected during malfunctions, out of control periods, repairs, and required quality assurance or quality control activities.

c. If using a PM CEMS to demonstrate compliance, compliance with the applicable emission limit in Table 2 shall be demonstrated on a 30-day rolling average basis, defined in 40 CFR 63.7575 as the arithmetic mean of the previous 720 hours of valid operating data. Valid operating data excludes periods of startup and shutdown, periods when the unit is not operating, data collected during malfunctions, out of control periods, repairs, and required quality assurance or quality control activities.

d. If using a CO CEMS to demonstrate compliance, compliance with the applicable emission limit in Table 2 shall be demonstrated on a 30-day rolling average basis, defined in 40 CFR 63.7575 as the arithmetic mean of the previous 720 hours of valid operating data. Valid operating data excludes periods of startup and shutdown, periods when the unit is not operating, data collected during malfunctions, out of control periods, repairs, and required quality assurance or quality control activities.

[Authority for term: 40 CFR 63.7525(a),(b) and (l), 40 CFR 63.7535, and 40 CFR 63.7575]

(4) Fuel Analysis

a. For each boiler burning more than one type of fuel and for which the permittee elects to demonstrate compliance with the applicable HCl, Hg, or TSM emission limits in Table 2 through performance testing or fuel analysis, an initial fuel analyses shall be conducted for each non-exempt of fuel burned in the boiler in accordance with 40 CFR 63.7521 and Table 6 to the subpart. For purposes of the fuel analysis requirements, boilers that use a supplemental fuel only for startup, shutdown, and transient flame stability purposes qualify as units that burn a single type of fuel and testing is not required for fuel burned in these units. Fuel analyses are not required for fuels used for only startup, unit shutdown, and transient flame stability purposes, or for natural gas, refinery gas, other gas 1 fuels, or fuels exempted in 40 CFR 63.7510(a)(2)(i) or (ii). 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. 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 analysis must be conducted for Cl and Hg, and for TSM if opting to comply with the TSM alternative. 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):

i. 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):

(a) 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;

(b) 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);

(c) 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; and

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

ii. 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):

(a) 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;

(b) during the performance testing for Hg, the fraction of the total heat input for each fuel type burned (Q_i) 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 (HG_i);

(c) 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; and

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

iii. 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):

(a) 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;

(b) during the performance testing for TSM, the fraction of the total heat input for each fuel type burned (Q_i) 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 (TSM_i);

(c) 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; and

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]

b. 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). For gaseous fuels, fuel analysis cannot be used for compliance with the HCl or TSM standards. 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 (including the use of equivalent methods as defined in 40 CFR 63.7575). 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. 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 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. Compliance is demonstrated by maintaining the rolling 12-month average emissions, established through the monthly fuel analyses, 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:

i. 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);

ii. 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; and

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.

iii. 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; and

1.028 = molecular weight ratio of HCl to Cl.

iv. 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"; and

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

v. 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"; and

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]

c. Fuel samples must be collected according to the procedures in 40 CFR 63.7521(c), or the methods listed in Table 6 of Subpart DDDDD, or using an automated sampling mechanism that provides representative composite fuel samples for each fuel type that includes both coarse and fine materials.

i. If collecting samples according to 40 CFR 63.7521(c), samples shall be collected as follows:

(a) 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.

(b) 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.

(c) 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.

(d) 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)]

g) Miscellaneous Requirements

a. None.