Ohio Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

5/26/2010

Certified Mail

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

Michael StClair
The Ohio State University
Environmental Health & Safety
1314 Kinnear Road
COLUMBUS, OH 43212-1168

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0125042608
Permit Number: P0105626
Permit Type: Administrative Modification
County: Franklin

Dear Permit Holder:

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

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

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

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

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA
Ohio EPA-CDO

Ohio Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install
for
The Ohio State University

Facility ID: 0125042608
Permit Number: P0105626
Permit Type: Administrative Modification
Issued: 5/26/2010
Effective: 5/26/2010

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
The Ohio State University

Table of Contents

Authorization

Facility ID: 0125042608
Facility Description: Colleges, universities and professional schools.
Application Number(s): A0038300
Permit Number: P0105626
Permit Description: Administrative modification to require use of PEMS in lieu of CEMS for NOx monitoring on 5 boilers.
Permit Type: Administrative Modification
Permit Fee: $3,125.00
Issue Date: 5/26/2010
Effective Date: 5/26/2010

This document constitutes issuance to:

The Ohio State University
2003 MILLIKIN ROAD
COLUMBUS, OH 43210-1268

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

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0105626
Permit Description: Administrative modification to require use of PEMS in lieu of CEMS for NOx monitoring on 5 boilers.

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

Emissions Unit ID:	**B132**
Company Equipment ID:	BOILER #5
Superseded Permit Number:	01-08714
General Permit Category and Type:	Not Applicable

Group Name: Boiler Group 1

Emissions Unit ID:	**B140**
Company Equipment ID:	McCracken New Boiler #1
Superseded Permit Number:	01-08714
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B141**
Company Equipment ID:	McCracken New Boiler #3
Superseded Permit Number:	01-08714
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B142**
Company Equipment ID:	McCracken New Boiler #6
Superseded Permit Number:	01-08714
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B143**
Company Equipment ID:	McCracken New Boiler #7
Superseded Permit Number:	01-08714
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

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

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

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

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

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

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

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

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

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

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

2. Severability Clause

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

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

3. General Requirements

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

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

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

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

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

4. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

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

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

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

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

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

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

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

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

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

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

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

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

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

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

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

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

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

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Central District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

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

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

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

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

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

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

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

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

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

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

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

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

   a) None.

2. Nitrogen Oxides (NOx) Budget Trading Program OAC Chapter 3745-14

   a) Facility Code - 0125042608

   b) The following regulated emissions units are subject to the applicable requirements specified in OAC Chapter 3745-14 and the annual NOx allowance allocations listed below:

      Emissions Unit:

      B132 - Boiler 5, gas/oil fired water tube boiler with low NOx burner. Boiler 5 is rated 313.1mmBtu/hr when firing natural gas and 300.1 mmBtu/hr when firing fuel oil.

      Annual Allowance for Calendar Years 2004 through 2007: 103.52 tons per year

   c) The emissions units identified in 2.b) above are NOx budget units under OAC rule 3745-14-01(C)(1)(b)(iii)*(a)*.

      [Authority for term: OAC rule 3745-14-01(C)(1)(b)]

   d) NOX allowances for units commencing operation on the dates specified in OAC rule 3745-14-01(C)(1)(b)(iii) shall be allocated in accordance with the provisions of OAC rule 3745-14-05(C)(1)(a)(ii).

      [Authority for term: OAC rule 3745-14-05(B)(2)]

   e) The NOx authorized account representative shall submit a complete NOx budget permit application in accordance with the deadlines specified in paragraphs (B)(2) and (B)(3) of OAC rule 3745-14-03. The NOx authorized account representative shall also submit, in a timely manner, any supplemental information that the Director determines is necessary in order to review a NOx budget permit application and issue or deny a NOx budget permit.

      [Authority for term: OAC rules 3745-14-01(E)(1)(a)(i), 3745-14-01(E)(1)(a)(ii), and 3745-14-03(B)(1)]

   f) Beginning May 31, 2004, the owners and operators of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under paragraph (E) of OAC rule 3745-14-06, as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with OAC rule 3745-14-08, plus any amount necessary to account for actual utilization under paragraph (C)(5) of OAC rule 3745-14-05 for the control period.

      [Authority for term: OAC rules 3745-14-01(E)(3)(a) and 3745-14-03(E)(3)(c)]

   g) NOx allowances shall be held in, deducted from, or transferred among NOx allowance tracking system accounts in accordance with OAC rules 3745-14-05, 3745-14-06, 3745-14-07, and 3745-14-09.

[Authority for term: OAC rule 3745-14-01(E)(3)(d)]

h) A NOx allowance shall not be deducted, in order to comply with the requirement under paragraph (E)(3)(a) of OAC rule 3745-14-01, for a control period in a year prior to the year for which the NOx allowance was allocated.

[Authority for term: OAC rule 3745-14-01(E)(3)(e)]

i) Each ton of NOx emitted in excess of the NOx budget emission limitation, as defined in OAC rule 3745-14-01(B)(2)(yy), shall constitute a separate violation of OAC Chapter 3745-14, the Clean Air Act, and applicable Ohio law. The owners and operators of a NOx budget unit that has excess emissions in any control period shall surrender the NOx allowances required for deduction under paragraph (E)(4)(a) of OAC rule 3745-14-06 and pay any fine, penalty, or assessment or comply with any other remedy imposed under paragraph (E)(4)(c) of OAC rule 3745-14-06.

[Authority for term: OAC rules 3745-14-01(E)(3)(b), 3745-14-01(E)(4)(a), and 3745-14-01(E)(4)(b)]

j) When recorded by the Administrator pursuant to OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from a NOx budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NOx budget permit of the NOx budget unit by operation of law without any further review.

[Authority for term: OAC rule 3745-14-01(E)(3)(h)]

k) Except as provided below, the Director shall revise the NOX budget permit, as necessary, in accordance with OAC rule 3745-77-08.

Each NOX budget permit is deemed to incorporate automatically the definitions of terms under paragraph (B) of OAC rule 3745-14-01 and, when recorded by the Administrator, in accordance with OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOX allowance to or from the compliance accounts of the NOX budget units covered by the permit or the overdraft account of the NOX budget source covered by the permit.

[Authority for term: OAC rules 3745-14-03(D)(2) and 3745-14-03(E)(1)]

l) The owner or operator of a NOx budget unit shall comply with the prohibitions under OAC rule 3745-14-08(A)(5).

[Authority for term: OAC rule 3745-14-08(A)(5)]

m) The owners and operators of the NOx budget unit shall keep on site at the source each of the following documents for a period of five years from the date the document is created: (This period may be extended for cause, at any time prior to the end of five years, in writing by the Director or Administrator.)

(1) the account certificate of representation for the NOx authorized account representative for the NOx budget unit and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (D) of OAC rule 3745-14-02, provided that the certificate and documents shall be retained on site at

the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate or representation changing the NOx authorized account representative;

(2) all emission monitoring information, in accordance with OAC rule 3745-14-08;

(3) copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx budget trading program; and

(4) copies of all documents used to complete a NOx budget permit application and any other submission under the NOx budget trading program or to demonstrate compliance with the requirements of the NOx budget trading program.

[Authority for term: OAC rule 3745-14-01(E)(5)(a)(i) through (iv)]

n) The permittee, and to the extent applicable, the NOx authorized account representative of the NOx budget unit, shall comply with the monitoring and reporting requirements as provided in OAC rule 3745-14-08 and in 40 CFR Part 75, Subpart H. For purposes of complying with such requirements the definitions in OAC rule 3745-14-01(B) and in 40 CFR 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 CFR Part 75 shall be replaced by the terms "NOx budget unit," "NOx authorized account representative," and "continuous emission monitoring system" (or "CEMS"), respectively, as defined in OAC rule 3745-14-01(B).

[Authority for term: OAC rules 3745-14-01(E)(2)(a), 3745-14-01(E)(5)(a)(ii), 3745-14-08(A)(2)(a) through (A)(2)(d), 3745-14-08(B)(2), and 3745-14-08(C)(1)]

o) The permittee shall comply with the monitoring plan requirements of 40 CFR Part 75.62, except that the monitoring plan is only required to include information required by 40 CFR Part 75, Subpart H.

[Authority for term: OAC rule 3745-14-08(E)(2)(b)]

p) The NOx authorized account representative of the NOx budget unit shall submit the reports and compliance certifications required under the NOx budget trading program, including those under OAC rules 3745-14-04 and 3745-14-08, to the Director and Administrator.

[Authority for term: OAC rule 3745-14-01(E)(5)(b)]

q) Each submission under the NOx budget trading program shall be submitted, signed, and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NOx authorized account representative:

"I am authorized to make this submission on behalf of the owners and operators of the NOx budget sources or NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware

that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

If the NOx authorized account representative for a NOx budget unit subject to an acid rain emission limitation who signed and certified any submission that is made under Subpart F or G of 40 CFR Part 75 and which includes data and information required under OAC rule 3745-14-08 or Subpart H of 40 CFR Part 75 is not the same person as the designated representative or the alternate designated representative for the unit under 40 CFR Part 72, then the submission shall also be signed by the designated representative or the alternate designated representative.

[Authority for term: OAC rules 3745-14-02(A)(5) and 3745-14-08(E)(1)(b)]

r) The NOx authorized account representative shall submit quarterly reports covering the period May 1 through September 30 of each year and including the data described in 40 CFR 75.74(c)(6). The NOx authorized account representative shall submit such quarterly reports, beginning with the calendar quarter covering May 1 through June 30, 2003. The NOx authorized account representative shall submit each quarterly report to the Administrator within thirty days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR Part 75, Subpart H.

[Authority for term: OAC rules 3745-14-08(E)(4)(b) and 3745-14-08(E)(4)(c)(i)]

s) The NOx authorized account representative shall submit to the Administrator a compliance certification in support of each quarterly report based on a reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The compliance certification shall state that:

(1) the monitoring data submitted were recorded in accordance with the applicable requirements of OAC rule 3745-14-08 and 40 CFR Part 75, including the quality assurance procedures and specifications.

[Authority for term: OAC rule 3745-14-08(E)(4)(d)(i)]

t) The NOx authorized account representative for a NOx budget unit shall submit written notice of monitoring system certification and re-certification test dates to the Director and the Administrator in accordance with 40 CFR Part 75.61. The NOx authorized account representative shall submit a certification application to the Administrator, U.S. EPA, Region V Office, and the Director within forty-five days after completing all initial or recertification tests required under paragraph (B) of OAC rule 3745-14-08, including the information required under Subpart H of 40 CFR Part 75.

[Authority for term: OAC rules 3745-14-08(D) and 3745-14-08(E)(3)]

u) For each control period in which one or more NOx budget units at a source are subject to the NOx budget emission limitation, the NOx authorized account representative of the source shall submit to the Director and the Administrator, by November 30 of that year, a compliance certification report for each source covering all such units.

The NOx authorized account representative shall include the following elements in the compliance certification report, in a format prescribed by the Administrator, concerning each unit

at the source and subject to the NOx budget emission limitation for the control period covered by the report:

(1) identification of each NOx budget unit;

(2) at the NOx authorized account representative's option, the serial numbers of the NOx allowances that are to be deducted from each unit's compliance account under paragraph (E) of OAC rule 3745-14-06 for the control period;

(3) at the NOx authorized account representative's option, for units sharing a common stack and having NOx emissions that are not monitored separately or apportioned in accordance with OAC rule 3745-14-08, the percentage of allowances that is to be deducted from each unit's compliance account under paragraph (E)(5) of OAC rule 3745-14-06; and

(4) the compliance certification under paragraph (A)(3) of OAC rule 3745-14-04.

[Authority for term: OAC rules 3745-14-04(A)(1) and 3745-14-04(A)(2)]

v) In the compliance certification report under 2.u)(4), the NOx authorized account representative shall certify, based upon reasonable inquiry of those persons with the primary responsibility for operating the source and the NOx budget units at the source in compliance with the NOx budget trading program, whether each NOx budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NOx budget trading program applicable to the unit, including all the following:

(1) whether the unit was operated in compliance with the NOx budget emission limitation;

(2) whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NOx emissions to the unit, in accordance with OAC rule 3745-14-08;

(3) whether all the NOx emissions from the unit, or group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with OAC rule 3745-14-08, and if conditional data were reported, the permittee shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report submissions have been made; and

(4) whether the facts that form the basis for certification under OAC rule 3745-14-08 of each monitor at the unit or group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under OAC rule 3745-14-08, if any, have changed.

If a change is required to be reported under 2.v)(4), specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.

[Authority for term: OAC rule 3745-14-04(A)(3)]

w) The NOx authorized account representative shall submit a complete NOx budget permit renewal application for the NOx budget source covering the NOx budget units at the source in accordance with paragraph (E) of OAC rule 3745-77-08.

[Authority for term: OAC rule 3745-14-03(B)(3)(a)]

x) The emission measurements recorded and reported in accordance with OAC rule 3745-14-08 shall be used to determine compliance by the unit with the NOx budget emission limitation under paragraph (E)(3) of OAC rule 3745-14-01.

[Authority for term: OAC rule 3745-14-01(E)(2)(b)]

y) The permittee shall develop and maintain a written quality assurance/quality control plan for each continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on-site and available for inspection during regular office hours.

[Authority for term: OAC rules 3745-14-08(A)(2)(c) and 3745-14-08(A)(2)(d)]

3. The permittee shall ensure that any CAIR NOx, SO2, or NOx ozone season units complies with the requirements of OAC 3745-109, which includes submitting timely permit applications. The permittee shall ensure that the affected emissions units comply with those requirements. Emissions exceeding any allowances that are lawfully held under Ohio rule 3745-109 are prohibited.

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

4. PSD Permitting Application Modeling Demonstration

Per permittee's air permit to install application dated January 2003, the permittee has submitted an air dispersion modeling demonstration, similar to a PSD permitting application modeling demonstration, which was demonstrated that the increased emissions from the existing emissions unit B132 and the installation of four new boilers (emissions units B140, B141, B142, and B143) in conjunction with the shut down of four existing boilers (emissions units B121, B122, B124, and B125) is in compliance with a PSD permitting application modeling demonstration as if the above mentioned permitting action was subject to a PSD permitting application modeling demonstration.

C. Emissions Unit Terms and Conditions

1. B132, BOILER 5

Operations, Property and/or Equipment Description:

Boiler 5 - gas/oil fired water tube boiler with low NOx burner. Boiler 5 is rated 313.1mmBtu/hr when firing natural gas and 300.1 mmBtu/hr when firing fuel oil.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Nitrogen oxides (NOx) emissions shall not exceed 0.036 lb/mmBtu when firing natural gas and 0.12 lb/mmBtu when firing number 2 distillate fuel oil. NOx emissions shall not exceed 103.52 tons per year when firing natural gas and/or number 2 distillate fuel oil. Carbon monoxide (CO) emissions shall not exceed 0.072 lb/mmBtu when firing natural gas and 0.17 lb/mmBtu when firing number 2 distillate fuel oil. CO emissions shall not exceed 161.04 tons per year when firing natural gas and/or number 2 distillate fuel oil. Particulate emissions (PE) shall not exceed 0.007 lb/mmBtu when firing natural gas and 0.0196 lb/mmBtu when firing number 2 distillate fuel oil. PE shall not exceed 17.68 tons per year when firing natural gas and/or number 2 distillate fuel oil. Volatile organic compound (VOC) emissions shall not exceed 0.008

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		lb/mmBtu when firing natural gas and 0.009 lb/mmBtu when firing number 2 distillate fuel oil. VOC emissions shall not exceed 11.40 tons per year when firing natural gas and/ or number 2 distillate fuel oil. Sulfur dioxide (SO2) emissions shall not exceed 0.0006 lb/mmBtu when firing natural gas and 0.056 lb/mmBtu when firing number 2 distillate fuel oil. SO2 emissions shall not exceed 37.80 tons per year when firing natural gas and/or number 2 distillate fuel oil. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and 40 CFR Part 60, Subpart Db. See c)(3) below.
b.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average when firing natural gas, except as provided by rule.
c.	40 CFR Part 60, Subpart Db	When firing number 2 distillate fuel oil, visible PE shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity, and because this emissions unit employs a high heat release rate as defined in 40 CFR Part 60.41b, the NOx emissions heat input limitation shall not exceed 0.2 lb/mmBtu expressed as NO2.
d.	OAC rule 3745-21-08(B) OAC rule 3745-21-07(B)	See b)(2)a. below.
e.	OAC rule 3745-31-13(D)(1)	See b)(2)b. below.
f.	OAC rule 3745-17-10(B)(1) OAC rule 3745-18-06(D) OAC rule 3745-23-06(C)(1) OAC rule 3745-23-06(C)(2)	The emission limitations established pursuant to OAC rule 3745-31-05(A)(3) are more stringent than the emission limitations established by these rules.
g.	40 CFR 63.52(a)(2)	See b)(2)f. below

(2) Additional Terms and Conditions

a. The permittee satisfies the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-21-07(B), respectively, by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

b. As a non-profit education institution, the permittee requested and received a discretionary exemption from the Director on March 14, 2003, to exempt this emissions unit from the PSD requirements contained in OAC rules 3745-31-10 through 3745-31-20.

c. This emissions unit is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

d. Each continuous NOx predictive emissions monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 16. At least 45 days before commencing certification testing of the NOx predictive emissions monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx predictive emissions continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix B, Performance Specification 16. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx predictive emissions monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct daily sensor evaluations; to conduct quarterly relative accuracy audits; and to conduct yearly relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60, Appendix B, Performance Specification 16.

[Authority for term: 40 CFR 60.13 and 40 CFR Part 60, Appendix B, Performance Specification 16]

e. The predictive emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes all sensors, algorithms, and data recording/processing hardware and software. Any change

to algorithms used to predict NOx emissions shall require new certification testing of the NOx predictive emissions monitoring systems.

[Authority for term: 40 CFR 60.2 and Appendix B to 40 CFR Part 60]

f. This emissions unit is subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act (CAA) due to the June 8, 2007, D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD).

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this permit that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

[Authority for term: 40 CFR 63.52(a)(2)]

c) Operational Restrictions

(1) The maximum annual fuel oil usage for this emissions unit shall not exceed 9,526,500 gallons.

(2) The quality of the number 2 distillate fuel oil burned in this emissions unit shall meet, on an as-received basis, a sulfur content which is equal to or less than 0.5 weight percent sulfur and is sufficient to comply with the allowable sulfur dioxide emission limitation specified in b)(1) above.

(3) The permittee shall operate low NOx burners and employ flue gas recirculation at all times this emissions unit is in operation.

(4) The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the particulate emissions from this emissions unit when combusting number 2 distillate fuel oil.

(5) The permittee shall operate and maintain predictive monitoring equipment to continuously predict and record the NOx emissions from this emissions unit when combusting natural gas and/or number 2 distillate fuel oil.

(6) The permittee shall burn only natural gas and/or number 2 distillate fuel oil in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

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

the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

(2) The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

a. Alternative 1:

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

b. Alternative 2:

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

(3) For each day during which the permittee burns a fuel other than natural gas or number 2 distillate fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(4) The permittee shall maintain daily records of the following information:

a. the natural gas consumption for each day (in million cubic feet);

b. the number 2 distillate fuel oil consumption for each day (in gallons);

c. the total actual heat input to the emissions unit, calculated as follows:

$$DI = DI_g + DI_o$$

DI = Total heat input for each day, mmBtu
DI_g = Daily heat input rate from Gas
DI_o = Daily heat input rate from Oil

When the unit is combusting natural gas, use the following equation to calculate heat input rate:

$$DI_g = (Q_g * GCV_g) / 10^3$$

Where:
DI_g = Daily heat input rate from pipeline natural gas, mmBtu/day.
Q_g = Metered flow rate of gaseous fuel combusted during unit operation, thousand standard cubic feet per day.
GCV_g = Gross calorific value of natural gas, as determined by sampling (for each monthly sample of pipeline natural gas, or as verified by the contractual supplier at least once every month pipeline natural gas is combusted) using ASTM D1826-88, ASTM D3588-91, ASTM D4891-89, GPA Standard 2172-86 "Calculation of Gross Heating Value, Relative Density and Compressibility Factor for Natural Gas Mixtures from Compositional Analysis," or GPA Standard 2261-90 "Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography," Btu/scf.
10^3 = Conversion of thousand Btu to mmBtu.

When the unit is combusting oil, use the following equation to calculate hourly heat input rate:

$$DI_o = V_{oil\text{-}rate} * D_{oil} * (GCV_o / 10^6)$$

Where:
DI_o = Daily heat input rate from oil, mmBtu/day.
$V_{oil\text{-}rate}$ = Volume rate of oil consumed per day, measured in gal/day
D_{oil} = Density of oil, measured in lb/gal
GCV_o = Gross calorific value of oil, as measured by ASTM D240-87, ASTM D2015-91, or ASTM D2382-88 for each batch of oil burned, Btu/unit mass, in lbs.
10^6 = Conversion of Btu to mmBtu.

d. the rolling, 30-day average NOx emission rate, in pounds per mmBtu, when firing natural gas; and

e. the rolling, 30-day average NOx emission rate, in pounds per mmBtu, when firing number 2 distillate fuel oil.

(5) The permittee shall collect and record the following information for the purpose of determining annual mass emissions:

a. the amount of natural gas used (in million cubic feet);

b. the amount of number 2 distillate fuel oil used (in gallons); and

c. the total amount of mass annual emissions of each pollutant listed in b)(1) emitted from this emissions unit, in pounds or tons.

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

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

(7) The permittee shall maintain a certification letter from the Ohio EPA documenting that the existing 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.

(8) The permittee shall maintain and implement a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60, Appendix B, Performance Specification 1. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that Performance Specification 1 is maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

(9) The permittee shall calculate the annual capacity factor each calendar year as defined in 40 CFR Part 60.41b individually for each fuel burned pursuant to 40 CFR Part 60.49b.(d). The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(10) The Ohio EPA, Central Office shall approve the initial certification testing protocol, and shall review all initial certification testing data. Upon a satisfactory review of the initial certification testing data, Ohio EPA shall acknowledge that the NOx predictive emissions monitoring system meets the requirements of Performance Specification 16 by sending a Certification Letter. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Initial certification of the B132 PEMs was granted in a letter dated April 13, 2010, by Ohio EPA, Central Office, Division of Air Pollution Control.

The predictive emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes all sensors, algorithms, and data recording/processing hardware and software.

[Authority for term: 40 CFR 60.13 and 40 CFR Part 60, Appendix B]

(11) The permittee shall install, operate, and maintain equipment to continuously predict and record NOx emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

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

a. predicted emissions of NOx in parts per million on an instantaneous (one-minute) basis;

b. predicted emissions of a diluents (O2 or CO2) in percent on an instantaneous (one-minute) basis;

c. predicted flow rates of the emissions stream, in dry standard cubic feet per minute (this is required only for NOx predictive emissions monitoring systems that are being used to demonstrate compliance with a NOx pound-per-hour limit.);

d. emissions of NOx in all units of the applicable standard(s) in the appropriate averaging period;

e. results of quarterly relative accuracy audits;

f. results of daily sensor checks and a list of adjustments or repairs/replacements that are made;

g. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

h. hours of operation of the emissions unit, NOx predictive emissions monitoring system, and control equipment;

i. the date, time, and hours of operation of the emissions unit without the control equipment and/or the NOx predictive emissions monitoring system;

j. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the NOx predictive emissions monitoring system; as well as,

k. the reason (if known) and the corrective actions taken (if any) for each such event in i. and j.

[Authority for term: 40 CFR 60.13 and 40 CFR Part 60, Appendix B]

e) Reporting Requirements

(1) The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates and any record which shows a deviation of the allowable sulfur content. The notification shall include a copy of such

record and shall be set to the Director (the Ohio EPA, Central District Office) within 45 days after the deviation occurs.

(2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number 2 distillate fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(3) The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office documenting all instances of opacity values in excess of the limitations specified above when firing number 2 distillate fuel oil, 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 continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) when firing number 2 distillate fuel oil, 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 until 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 also 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 date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. 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 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

(4) The permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective action(s) taken (if any), of all 30-day average NOx values in excess of the applicable NOx emission rate (pound per mmBtu).

The reports shall also identify any predictive NOx 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 until 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 also 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 date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. 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 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

(5) The permittee shall submit quarterly reports of the following information:

a. certifying that only very low sulfur oil meeting the definition in 40 CFR Part 60.41b was combusted in this emissions unit during the preceding quarter;

b. if the certification specified in e)(5)a. is not submitted, then the permittee shall submit the following information along with the appropriate information contained within 40 CFR Part 60.49b(k):

i. the number of hourly averages available for outlet emissions rates and inlet emissions rates;

ii. the standard deviation of hourly averages for outlet emissions rates and inlet rates, as determined in 40 CFR Part 60, Subpart A, Method 19, section 7;

iii. the lower confidence limit for the mean outlet emission rate and upper confidence limit for the mean inlet emission rate, as calculated in 40 CFR Part 60, Subpart A, Method 19, section 7; and

iv. the ratio of the lower confidence limit for the mean outlet emission rate and the allowable emission rate, as calculated in 40 CFR Part 60, Subpart A, Method 19, section 7.

(6) The permittee shall submit annual reports that specify the total particulate, SO2, VOC, NOx, CO emissions and natural gas and fuel oil usages for this emissions unit for the previous calendar year. These reports shall be submitted by January 30 of each year.

(7) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its NOx predictive emissions monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of NOx predicted emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

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

i. the facility name and address;

ii. the manufacturer, model number, and serial number of the NOx predictive emissions monitoring systems;

iii. a description of any change in the equipment that comprises the predictive emission monitoring system, including any change to the hardware, and/or changes to the software in the predictive algorithms;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the NOx predictive emissions monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly relative accuracy audits;

ix. unless previously submitted, the results of any relative accuracy test audit showing the NOx predictive emissions monitor out-of-control and the compliant results following any corrective actions;

x. the date, time, and duration of any/each malfunction** of the NOx predictive monitoring system, emissions unit, and/or control equipment;

xi. the date, time, and duration of any downtime** of the NOx predictive emissions monitoring system and/or control equipment while the emissions unit was in operation; and

xii. the reason (if known) and the corrective actions taken (if any) for each event in x. and xi.

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

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

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

[Authority for tem: 40 CFR 60.7]

f) Testing Requirements

(1) The permittee performed an initial certification test for the predictive emissions monitoring system in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 16 in February 2010. Annual recertification testing shall be performed in accordance with and at the frequencies required by 40 CFR Part 60, Appendix B, Performance Specification 16 and Ohio Revised Code (ORC) section 3704.03(I).

Personnel from the Ohio EPA Central Office and the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the appropriate Ohio EPA District Office or local air agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the NOx predictive emissions monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 16 and ORC section 3704.03(I).

Initial certification of the B132 PEMs was granted in a letter dated April 13, 2010, by Ohio EPA, Central Office, Division of Air Pollution Control.

[Authority for term: 40 CFR 60.13 and 40 CFR Part 60, Appendix B]

(2) Compliance with the emission limitations in b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitations:
Nitrogen oxide (NOx) emissions shall not exceed 0.036 lb/mmBtu of actual heat input while firing natural gas and 0.12 lb/mmBtu of actual heat input while firing number 2 distillate fuel oil.

Applicable Compliance Method:
When firing number 2 distillate fuel oil, compliance with the emissions limitations shall be demonstrated on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOx emission data for the preceding 30 steam generating unit operating days.

When firing natural gas, compliance with the emissions limitations shall be demonstrated on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOx emission data for the preceding 30 steam generating unit operating days.

If required, the permittee shall demonstrate compliance with these emission limitations through emissions tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

b. Emission Limitations:
Nitrogen oxide (NOx) emissions shall not exceed 103.52 tons per year when firing natural gas and/or number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated by summing the annual natural gas and number 2 distillate fuel oil emissions.

The annual natural gas emissions shall be determined by multiplying the predictive emissions monitoring system emission data (lbs NOx/mmBtu) by the average annual natural gas heat content (Btu/cu ft) by the annual natural gas usage (mmcu ft/yr) and dividing by 2,000 lbs/ton.

The annual number 2 distillate fuel oil emissions shall be determined by multiplying the predictive emissions monitoring system emission data (lbs NOx/mmBtu) by the average annual number 2 distillate fuel oil heat content (Btu/gal) by the annual number 2 distillate fuel oil usage (gal/yr) and dividing by 1,000,000 BTU/mmBtu and again by 2,000 lbs/ton.

c. Emission Limitations:
Carbon monoxide (CO) emissions shall not exceed 0.072 lb/mmBtu of actual heat input while firing natural gas and 0.17 lb/mmBtu of actual heat input while firing number 2 distillate fuel oil.

Applicable Compliance Method:
When firing natural gas, compliance shall be demonstrated by multiplying the maximum hourly gas burning capacity of the emission unit (302,512 cu ft/hr) by the emission factor supplied by the boiler manufacturer (Babcock and Wilcox, 04/29/2001) for CO in natural gas combustion (74.5 lbs CO/mmcu ft) and dividing by the maximum hourly heat input capacity of the emission unit (313 mmBtu/hr).

When firing number 2 distillate fuel oil, compliance shall be demonstrated with the boiler manufacturer's emission factor data (0.17 lb/mmBtu, Babcock and Wilcox, 04/24/1998).

If required, the permittee shall demonstrate compliance with this emission limitation through emission test performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

d. Emission Limitation:
Carbon monoxide (CO) emissions shall not exceed 161.04 tons per year when firing natural gas and/or number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated by summing the annual natural gas and number 2 distillate fuel oil emissions.

The annual natural gas emissions shall be determined by multiplying annual natural gas usage (cu ft/yr) by the emission factor supplied by the boiler manufacturer (Babcock and Wilcox, 04/29/2001) for CO in natural gas combustion (74.5 lbs of CO/mmcu ft) and dividing by 2,000 lbs/ton.

The annual number 2 distillate fuel oil emissions shall be determined by multiplying annual number 2 distillate fuel oil usage (gal/yr) by the heat content of the oil (Btu/gal) by the emission factor supplied by the boiler manufacturer (Babcock and Wilcox, 04/24/1998) for CO in number 2 distillate fuel oil combustion (0.17 lb CO/mmBtu) and dividing by 2,000 lbs/ton and by 1,000,000 Btu/mmBtu.

e. Emission Limitations:
Particulate emissions (PE) shall not exceed 0.007 lb/mmBtu of actual heat input when firing natural gas and 0.0196 lb/mmBtu of actual heat input when firing number 2 distillate fuel oil.

Applicable Compliance Method:
When firing natural gas, compliance shall be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (302,512 cu ft/hr) by the boiler manufacturer's emission factor (Babcock and Wilcox, 04/24/1998) for PE in natural gas combustion (7.25 lbs PE/mmcu ft) and dividing by the maximum hourly heat input capacity of the emissions unit (313 mmBtu/hr).

When firing number 2 distillate fuel oil, compliance shall be demonstrated by the most recent emission test.

If required, the permittee shall demonstrate compliance with this emission limitation through emission test performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

f. Emission Limitation:
Particulate emissions (PE) shall not exceed 17.68 tons per year when firing natural gas and/or number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated by summing the annual natural gas and number 2 distillate fuel oil emissions.

The natural gas annual emissions shall be determined by multiplying the annual natural gas usage (mmcu ft/yr) by the boiler manufacturer's emission factor (Babcock and Wilcox, 04/24/1998) for PE in natural gas combustion (7.25 lbs PE/mmcu ft), and dividing by 2,000 pounds per ton.

The number 2 fuel oil emissions shall be determined by multiplying the emission factor established during the most recent emission test that demonstrated compliance (lbs PE/mmBtu) by the annual number 2 fuel oil usage (gal/yr) by the annual average fuel oil heating value (Btu/gal) and dividing by 1,000,000 Btu/mmBtu and by 2,000 pounds per ton.

g. Emission Limitations:
Volatile organic compound (VOC) emissions shall not exceed 0.008 lb/mmBtu of actual heat input when firing natural gas and 0.009 lb/mmBtu of actual heat input when firing number 2 distillate fuel oil.

Applicable Compliance Method:
When firing natural gas, compliance shall be demonstrated by multiplying the maximum hourly gas burning capacity of the emissions unit (302,512 cu ft/hr) by the boiler manufacturer's emission factor (Babcock and Wilcox, 04/24/1998) for volatile organic compounds in natural gas combustion (8.28 lbs VOC/mmcu ft), and dividing by the maximum hourly heat input capacity of the emissions unit (313 mmBtu/hr).

When firing number 2 distillate fuel oil, compliance with this emission limitation may be demonstrated by multiplying the maximum fuel oil burning capacity of the emissions unit (2,144 gal/hr) by the boiler manufacturer's emission factor (Babcock and Wilcox, 04/24/1998) for volatile organic compounds in number 2 distillate fuel oil combustion (1.26 lbs VOC/1000 gal), and dividing by the maximum hourly heat input capacity of the emissions unit (300.1 mmBtu/hr).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

h. Emission Limitation:
Volatile organic compound emissions (VOC) shall not exceed 11.40 tons/year when firing natural gas and/or number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated by summing the annual natural gas and number 2 distillate fuel oil emissions.

The natural gas annual emissions shall be determined by multiplying the annual natural gas usage (cu ft/yr) by the boiler manufacturer's emission factor (Babcock and Wilcox, 04/24/1998) for volatile organic compounds in natural gas combustion (8.28 lbs VOC/mmcu ft), and dividing by 2,000 pounds per ton.

The number 2 distillate fuel oil emissions shall be determined by multiplying the annual number 2 distillate fuel oil usage (gal) by the boiler manufacturer's emission factor (Babcock and Wilcox, 04/24/1998) for volatile organic compounds in number 2 distillate fuel oil combustion (1.26 lbs VOC/1000 gal), and dividing by 2,000 pounds per ton.

i. Emission Limitations:
Sulfur dioxide (SO2) emissions shall not exceed 0.0006 lb/mmBtu of actual heat input when firing natural gas and 0.056 lb/mmBtu of actual heat input when firing number 2 distillate fuel oil.

Applicable Compliance Method:
When firing fuel oil, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation.

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6, while firing number 2 distillate fuel oil.

j. Emission Limitation:
Sulfur dioxide (SO2) emissions shall not exceed 37.80 tons/year when firing natural gas and/or number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated by summing the annual natural gas and number 2 distillate fuel oil emissions.

The natural gas annual emissions shall be determined by multiplying the annual natural gas usage (cu ft/yr) by the emission factor from AP-42 Table 1.4-2 (07/1998) for SO2 in natural gas combustion (0.6 lb SO2/mmcu ft), and dividing by 2,000 pounds per ton.

When firing number 2 distillate fuel oil compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by multiplying the annual number 2 distillate fuel oil consumption (gal/year) by the emission factor of 142*S lbs SO2/1,000 gal, where S equals sulfur content (from AP-42, Table 1.3-1, 04/2000) and dividing by 2,000 pounds per ton.

k. Emission Limitation:
Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average when firing natural gas, except as provided by rule.

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

l. Emission Limitation:
Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity when firing number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance may be determined by data collected and recorded for the COM and, if required, by visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) Per permittee's air permit to install application dated January 2003, the permittee shall comply with all applicable provisions of OAC rule 3745-14 for emissions unit B132 if appropriate, including but not limited to, certain NOx emissions limitations in the

emissions trading program, obtain permits, comply with trading procedures and meet the monitoring and reporting requirements in this rule. See B.2. and B.3. in the facility-wide terms and conditions section of this permit.

2. Emissions Unit Group - Boiler Group 1: B140, B141, B142, B143,

EU ID	Operations, Property and/or Equipment Description
B140	New Boiler 1 - 206 mmBtu/hr gas/oil fired water tube boiler with low NOx burner
B141	New Boiler 3 - 206 mmBtu/hr gas/oil fired water tube boiler with low NOx burner
B142	New Boiler 6 - 206 mmBtu/hr gas/oil fired water tube boiler with low NOx burner
B143	New Boiler 7 - 206 mmBtu/hr gas/oil fired water tube boiler with low NOx burner

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Nitrogen oxides (NOx) emissions shall not exceed 0.035 lb/mmBtu when firing natural gas and 0.10 lb/mmBtu when firing number 2 distillate fuel oil. NOx emissions shall not exceed 59.15 tons per year when firing natural gas and/or number 2 distillate fuel oil. Carbon monoxide (CO) emissions shall not exceed 0.04 lb/mmBtu when firing natural gas and 0.08 lb/mmBtu when firing number 2 distillate fuel oil. CO emissions shall not exceed 52.74 tons per year when firing natural gas and/or number 2 distillate fuel oil. Particulate emissions (PE) shall not exceed 0.005 lb/mmBtu when firing natural gas and 0.02 lb/mmBtu when firing number 2 distillate fuel oil. PE shall not exceed 10.93 tons per year when firing natural gas and/or number 2 distillate fuel oil.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Volatile organic compound (VOC) emissions shall not exceed 0.004 lb/mmBtu when firing natural gas and 0.004 lb/mmBtu when firing number 2 distillate fuel oil. VOC emissions shall not exceed 3.54 tons per year when firing natural gas and/or number 2 distillate fuel oil. Sulfur dioxide (SO2) emissions shall not exceed 0.0006 lb/mmBtu when firing natural gas and 0.052 lb/mmBtu when firing number 2 distillate fuel oil. SO2 emissions shall not exceed 22.82 tons per year when firing natural gas and/or number 2 distillate fuel oil. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and 40 CFR Part 60, Subpart Db. See c)(3) below.
b.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a 6-minute average when firing natural gas, except as provided by rule.
c.	40 CFR Part 60, Subpart Db	Visible PE shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity, when firing number 2 distillate fuel oil.
d.	OAC rule 3745-21-07(B) OAC rule 3745-21-08(B) OAC rule 3745-23-06(B)	See b)(2)a. below.
e.	OAC rule 3745-31-13(D)(1)	See b)(2)b. below.
f.	OAC rule 3745-17-10(B)(1) OAC rule 3745-18-06(D)	The emission limitations established pursuant to OAC rule 3745-31-05(A)(3) are more stringent than the emission limitations established by these rules.
g.	40 CFR 63.52(a)(2)	See b)(2)f. below

(2) Additional Terms and Conditions

a. The permittee satisfies the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and both 3745-23-06 and 3745-21-07 , respectively, by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

b. As a non-profit education institution, the permittee requested and received a discretionary exemption from the Director on March 14, 2003, to exempt this emissions unit from the PSD requirements contained in OAC rules 3745-31-10 through 3745-31-20.

c. These emissions units are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60. The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

d. Each continuous NOx predictive emissions monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 16. At least 45 days before commencing certification testing of the NOx predictive emissions monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx predictive emissions continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix B, Performance Specification 16. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx predictive emissions monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct daily sensor evaluations; to conduct quarterly relative accuracy audits; and to conduct yearly relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60, Appendix B, Performance Specification 16.

[Authority for term: 40 CFR 60.13 and 40 CFR Part 60, Appendix B, Performance Specification 16]

e. The predictive emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes all sensors, algorithms, and data recording/processing hardware and software. Any change

to algorithms used to predict NOx emissions shall require new certification testing of the NOx predictive emissions monitoring systems.

[Authority for term: 40 CFR 60.2 and Appendix B to 40 CFR Part 60]

f. These emissions units are subject to a case-by-case MACT determination pursuant to section 112(j) of the Clean Air Act (CAA) due to the June 8, 2007, D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD).

If notified by the Ohio EPA or U.S. EPA, the permittee shall submit an application for a revision to this permit that meets the requirements of 40 CFR 63.52(a)(2) pertaining to case-by-case MACT determinations. The 30-day clock for submittal of a 112(j) application does not begin until such notification is made by Ohio EPA or U.S. EPA.

[Authority for term: 40 CFR 63.52(a)(2)]

c) Operational Restrictions

(1) The maximum annual fuel oil usage for each emissions unit shall not exceed 6,285,300 gallons.

(2) The quality of the number 2 distillate fuel oil burned in these emissions units shall meet, on an as-received basis, a sulfur content which is equal to or less than 0.5 weight percent sulfur and is sufficient to comply with the allowable sulfur dioxide emission limitation specified in b)(1) above.

(3) The permittee shall operate low NOx burners and employ flue gas recirculation at all times these emissions units are in operation.

(4) The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the particulate emissions from these emissions units when combusting number 2 distillate fuel oil.

(5) The permittee shall operate and maintain predictive monitoring equipment to continuously predict and record the NOx emissions from this emissions unit when combusting natural gas and/or number 2 distillate fuel oil.

(6) The permittee shall burn only natural gas and/or number 2 distillate fuel oil in these emissions units.

d) Monitoring and/or Recordkeeping Requirements

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

the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

(2) The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

The permittee shall maintain records of the oil burned in each emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

a. Alternative 1:

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

b. Alternative 2:

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

(3) For each day during which the permittee burns a fuel other than natural gas or number 2 distillate fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(4) The permittee shall maintain daily records of the following information for each emissions unit:

a. the natural gas consumption for each day (in million cubic feet);

b. the number 2 distillate fuel oil consumption for each day (in gallons);

c. the total actual heat input to the emissions unit, calculated as follows:

$$DI = DI_g + DI_o$$

DI = Total heat input for each day, mmBtu
DI_g = Daily heat input rate from Gas
DI_o = Daily heat input rate from Oil

When the unit is combusting natural gas, use the following equation to calculate heat input rate:

$$DI_g = (Q_g * GCV_g) / 10^3$$

Where:
DI_g = Daily heat input rate from pipeline natural gas, mmBtu/day.
Q_g = Metered flow rate of gaseous fuel combusted during unit operation, thousand standard cubic feet per day.
GCV_g = Gross calorific value of natural gas, as determined by sampling (for each monthly sample of pipeline natural gas, or as verified by the contractual supplier at least once every month pipeline natural gas is combusted) using ASTM D1826-88, ASTM D3588-91, ASTM D4891-89, GPA Standard 2172-86 "Calculation of Gross Heating Value, Relative Density and Compressibility Factor for Natural Gas Mixtures from Compositional Analysis," or GPA Standard 2261-90 "Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography," Btu/scf.
10^3 = Conversion of thousand Btu to mmBtu.

When the unit is combusting oil, use the following equation to calculate hourly heat input rate:

$$DI_o = V_{oil\text{-}rate} * D_{oil} * (GCV_o / 10^6)$$

Where:
DI_o = Daily heat input rate from oil, mmBtu/day.
$V_{oil\text{-}rate}$ = Volume rate of oil consumed per day, measured in gal/day
D_{oil} = Density of oil, measured in lb/gal
GCV_o = Gross calorific value of oil, as measured by ASTM D240-87, ASTM D2015-91, or ASTM D2382-88 for each batch of oil burned, Btu/unit mass, in lbs.
10^6 = Conversion of Btu to mmBtu.

d. beginning after the initial compliance demonstration, the rolling, 30-day average NOx emission rate, in pounds per mmBtu, when firing natural gas; and

e. beginning after the initial compliance demonstration, the rolling, 30-day average NOx emission rate, in pounds per mmBtu, when firing number 2 distillate fuel oil.

(5) The permittee shall collect and record the following information for the purpose of determining annual mass emissions for each emissions unit:

a. the amount of natural gas used (in million cubic feet);

b. the amount of number 2 distillate fuel oil used (in gallons); and

c. the total amount of mass annual emissions of each pollutant listed in b)(1) emitted from the emissions unit, in pounds or tons.

(6) The permittee shall properly install, operate and maintain equipment to continuously monitor and record the opacity of the particulate emissions from each emissions unit when combusting number 2 distillate fuel oil. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Prior to the installation of the continuous opacity monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirement in 40 CFR Part 60, Appendix B, Performance Specification 1 for approval by the Ohio EPA, Central Office.

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

(7) Within 60 days after achieving the maximum production rate at which these emissions units will be operated, but not later than 180 days after its initial startup, the permittee shall conduct certification tests on the continuous opacity monitoring system equipment pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 1. Personnel from the Ohio EPA, Central District Office shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to the Ohio EPA, Central District Office pursuant to OAC rule 3745-15-04 within 30 days after the test is completed. Certification of the continuous opacity monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 1.

(8) The permittee shall maintain and implement a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60, Appendix B, Performance Specification 1. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that Performance Specification 1 is maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

(9) The permittee shall calculate the annual capacity factor each calendar year as defined in 40 CFR Part 60.41b individually for each fuel burned pursuant to 40 CFR Part 60.49b.(d). The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(10) The Ohio EPA, Central Office shall approve the initial certification testing protocol, and shall review all initial certification testing data. Upon a satisfactory review of the initial

certification testing data, Ohio EPA shall acknowledge that the NOx predictive emissions monitoring system meets the requirements of Performance Specification 16 by sending a Certification Letter. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Initial certification of the B140, B141, B142, and B143 PEMs was granted in a letter dated January 25, 2010, by Ohio EPA, Central Office, Division of Air Pollution Control.

The predictive emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes all sensors, algorithms, and data recording/processing hardware and software.

[Authority for term: 40 CFR 60.13 and 40 CFR Part 60, Appendix B]

(11) The permittee shall install, operate, and maintain equipment to continuously predict and record NOx emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

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

a. predicted emissions of NOx in parts per million on an instantaneous (one-minute) basis;

b. predicted emissions of a diluents (O2 or CO2) in percent on an instantaneous (one-minute) basis;

c. predicted flow rates of the emissions stream, in dry standard cubic feet per minute (this is required only for NOx predictive emissions monitoring systems that are being used to demonstrate compliance with a NOx pound-per-hour limit.);

d. emissions of NOx in all units of the applicable standard(s) in the appropriate averaging period;

e. results of quarterly relative accuracy audits;

f. results of daily sensor checks and a list of adjustments or repairs/replacements that are made;

g. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

h. hours of operation of the emissions unit, NOx predictive emissions monitoring system, and control equipment;

i. the date, time, and hours of operation of the emissions unit without the control equipment and/or the NOx predictive emissions monitoring system;

j. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the NOx predictive emissions monitoring system; as well as,

k. the reason (if known) and the corrective actions taken (if any) for each such event in i. and j.

[Authority for term: 40 CFR 60.13 and 40 CFR Part 60, Appendix B]

e) Reporting Requirements

(1) Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);
b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
c. actual start-up date (within 15 days after such date); and
d. date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 1049
Columbus, OH 43216-1049

and

Ohio EPA, Central District Office
Air Pollution Group
P.O. Box 1049
Columbus, OH 43216-1049

(2) The permittee shall notify the Director (the Ohio EPA, Central District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates and any record which shows a deviation of the allowable sulfur content. The notification shall include a copy of such record and shall be set to the Director (the Ohio EPA, Central District Office) within 45 days after the deviation occurs.

(3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number 2 distillate fuel oil was burned in these emissions units. Each report shall be submitted within 30 days after the deviation occurs.

(4) Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office documenting all instances of opacity values in excess of the limitations specified above when firing number 2 distillate fuel oil, 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).

For each emissions unit, the reports shall also identify any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) when firing number 2 distillate fuel oil, 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 also 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 date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of each emissions unit and the total operating time of the analyzer while each emissions unit was on line also shall be included in the quarterly report.

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

(5) Pursuant to OAC rule 3745-15-04 and ORC sections 3704.03(I) and 3704.031, the permittee shall submit reports (hardcopy or electronic format) within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective action(s) taken (if any), of all 30-day average NOx values in excess of the applicable NOx emission rate (pound per mmBtu).

The reports shall also identify any predictive NOx 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 until 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 also 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 date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of each emissions unit and the total operating time of the analyzer while each emissions unit was on line also shall be included in the quarterly report.

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

(6) The permittee shall submit quarterly reports of the following information:

a. certifying that only very low sulfur oil meeting the definition in 40 CFR Part 60.41b was combusted in these emissions units during the preceding quarter;

b. if the certification in e)(6)a. is not submitted, then the permittee shall submit the following information along with the appropriate information contained within 40 CFR Part 60.49b(k):

i. the number of hourly averages available for outlet emissions rates and inlet emissions rates;

ii. the standard deviation of hourly averages for outlet emissions rates and inlet rates, as determined in 40 CFR Part 60, Subpart A, Method 19, section 7;

iii. the lower confidence limit for the mean outlet emission rate and upper confidence limit for the mean inlet emission rate, as calculated in 40 CFR Part 60, Subpart A, Method 19, section 7; and

iv. the ratio of the lower confidence limit for the mean outlet emission rate and the allowable emission rate, as calculated in 40 CFR Part 60, Subpart A, Method 19, section 7.

(7) The permittee shall submit annual reports that specify the total particulate, SO2, VOC, NOx and CO emissions and natural gas and fuel oil usages for these emissions units for the previous calendar year. These reports shall be submitted by January 30 of each year.

(8) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its NOx predictive emissions monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of NOx predicted emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

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

i. the facility name and address;

ii. the manufacturer, model number, and serial number of the NOx predictive emissions monitoring systems;

iii. a description of any change in the equipment that comprises the predictive emission monitoring system, including any change to the hardware, and/or changes to the software in the predictive algorithms;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the NOx predictive emissions monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly relative accuracy audits;

ix. unless previously submitted, the results of any relative accuracy test audit showing the NOx predictive emissions monitor out-of-control and the compliant results following any corrective actions;

x. the date, time, and duration of any/each malfunction** of the NOx predictive monitoring system, emissions unit, and/or control equipment;

xi. the date, time, and duration of any downtime** of the NOx predictive emissions monitoring system and/or control equipment while the emissions unit was in operation; and

xii. the reason (if known) and the corrective actions taken (if any) for each event in x. and xi.

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

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

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

[Authority for term: 40 CFR 60.7]

f) Testing Requirements

(1) The permittee performed an initial certification test for each predictive emissions monitoring system in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 16 in November 2009. Annual recertification testing shall be performed in accordance with and at the frequencies required by 40 CFR Part 60, Appendix B, Performance Specification 16 and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the appropriate Ohio EPA District Office or local air agency and one copy to Ohio EPA

Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the NOx predictive emissions monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specification 16 and ORC section 3704.03(I).

Initial certification of the B140, B141, B142, and B143 PEMs was granted in a letter dated January 25, 2010, by Ohio EPA, Central Office, Division of Air Pollution Control.

[Authority for term: 40 CFR 60.13 and 40 CFR Part 60, Appendix B]

(2) Within 60 days after achieving the maximum production rate at which these emissions units will be operated, but not later than 180 days after its initial startup, the permittee shall conduct performance tests to demonstrate compliance with the particulate emission limitation and NOx emission limitation while firing number 2 distillate fuel oil. The permittee has completed this test.

The particulate emission test shall be conducted in accordance with the procedures specified in 40 CFR Parts 60.8 and 60.46b(d). The test shall be conducted while the emissions units are operating at or near its maximum capacity, while firing number 2 distillate fuel oil.

The NOx performance test shall be conducted using the NOx monitoring system in accordance with the procedures specified in 40 CFR Parts 60.8 and 60.46b(e). The test shall be conducted while the emissions unit is operating at or near its maximum capacity, while firing number 2 distillate fuel oil.

(3) Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

(4) A comprehensive written report on the results of the emission(s) test(s) shall be submitted to the Ohio EPA, Central District Office within 30 days following the completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Central District Office.

(5) Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

(6) Compliance with the emission limitations in b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitations:
Nitrogen oxide (NOx) emissions shall not exceed 0.035 lb/mmBtu of actual heat input while firing natural gas and 0.10 lb/mmBtu of actual heat input while firing number 2 distillate fuel oil.

Applicable Compliance Method:
Following the initial performance test, when firing number 2 distillate fuel oil, compliance with the emissions limitations shall be demonstrated on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOx emission data for the preceding 30 steam generating unit operating days.

When firing natural gas, compliance with the emissions limitations shall be demonstrated on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOx emission data for the preceding 30 steam generating unit operating days.

b. Emission Limitation:
Nitrogen oxide (NOx) emissions shall not exceed 59.15 tons per year when firing natural gas and/or number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated by summing the annual natural gas and number 2 distillate fuel oil emissions.

The annual natural gas emissions shall be determined by multiplying the predictive emissions monitoring system emission data (lbs NOx/mmBtu) by the average annual natural gas heat content (Btu/cu ft) by the annual natural gas usage (mmcu ft/yr) and dividing by 2,000 lbs/ton.

The annual number 2 distillate fuel oil emissions shall be determined by multiplying the predictive emissions monitoring system emission data (lbs NOx/mmBtu) by the average annual number 2 distillate fuel oil heat content (Btu/gal) by the annual number 2 distillate fuel oil usage (gal/yr) and dividing by 1,000,000 BTU/mmBtu and again by 2,000 lbs/ton.

c. Emission Limitations:
Carbon monoxide (CO) emissions shall not exceed 0.04 lb/mmBtu of actual heat input while firing natural gas and 0.08 lb/mmBtu of actual heat input while firing number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated with the boiler manufacturer's emission factor data: 0.04 lb/mmBtu for natural gas and 0.08 lb/mmBtu for number 2 distillate fuel oil (Nebraska Boiler Company, 08/28/2002).

If required, the permittee shall demonstrate compliance with this emission limitation through emission test performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

d. Emission Limitation:
Carbon monoxide (CO) emissions shall not exceed 52.74 tons per year when firing natural gas and/or number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated by summing the annual natural gas and number 2 distillate fuel oil emissions.

The annual natural gas emissions shall be determined by multiplying annual natural gas usage (cu ft/yr) by the heat content of the gas (Btu/cu ft) by the emission factor supplied by the boiler manufacturer (Nebraska Boiler Company, 08/28/2002) for CO in natural gas combustion (0.04 lb/mmBtu) and dividing by 1,000,000 BTU/mmBtu and again by 2,000 lbs/ton.

The annual number 2 distillate fuel oil emissions shall be determined by multiplying annual number 2 distillate fuel oil usage (gal/yr) by the heat content of the oil (Btu/gal) by the emission factor supplied by the boiler manufacturer (Nebraska Boiler Company, 08/28/2002) for CO in number 2 distillate fuel oil combustion (0.08 lb/mmBtu) and dividing by 1,000,000 BTU/mmBtu and again by 2,000 lbs/ton.

e. Emission Limitations:
Particulate emissions (PE) shall not exceed 0.005 lb/mmBtu of actual heat input when firing natural gas and 0.02 lb/mmBtu of actual heat input when firing number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated with the boiler manufacturer's emission factor data: 0.005 lb/mmBtu for natural gas and 0.02 lb/mmBtu for number 2 distillate fuel oil (Nebraska Boiler Company, 08/28/2002).

f. Emission Limitation:
Particulate emissions (PE) shall not exceed 10.93 tons per year when firing natural gas and/or number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated by summing the annual natural gas and number 2 distillate fuel oil emissions.

The annual natural gas emissions shall be determined by multiplying annual natural gas usage (cu ft/yr) by the heat content of the gas (Btu/cu ft) by the emission factor supplied by the boiler manufacturer (Nebraska Boiler Company, 08/28/2002) for PE in natural gas combustion (0.005 lb/mmBtu) and dividing by 1,000,000 BTU/mmBtu and again by 2,000 lbs/ton.

The annual number 2 distillate fuel oil emissions shall be determined by multiplying annual number 2 distillate fuel oil usage (gal/yr) by the heat content of the oil (Btu/gal) by the emission factor supplied by the boiler manufacturer (Nebraska Boiler Company, 08/28/2002) for PE in number 2 distillate fuel oil combustion (0.02 lb/mmBtu) and dividing by 1,000,000 BTU/mmBtu and again by 2,000 lbs/ton.

g. Emission Limitations:
Volatile organic compound (VOC) emissions shall not exceed 0.004 lb/mmBtu of actual heat input when firing natural gas and 0.004 lb/mmBtu of actual heat input when firing number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated with the boiler manufacturer's emission factor data: 0.004 lb/mmBtu for natural gas and 0.004 lb/mmBtu for number 2 distillate fuel oil (Nebraska Boiler Company, 08/28/2002).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25.

h. Emission Limitation:
Volatile organic compound emissions (VOC) shall not exceed 3.54 tons/year when firing natural gas and/or number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated by summing the annual natural gas and number 2 distillate fuel oil emissions.

The annual natural gas emissions shall be determined by multiplying annual natural gas usage (cu ft/yr) by the heat content of the gas (Btu/cu ft) by the emission factor supplied by the boiler manufacturer (Nebraska Boiler Company, 08/28/2002) for VOC in natural gas combustion (0.004 lb/mmBtu) and dividing by 1,000,000 BTU/mmBtu and again by 2,000 lbs/ton.

The annual number 2 distillate fuel oil emissions shall be determined by multiplying annual number 2 distillate fuel oil usage (gal/yr) by the heat content of the oil (Btu/gal) by the emission factor supplied by the boiler manufacturer (Nebraska Boiler Company, 08/28/2002) for VOC in number 2 distillate fuel oil combustion (0.004 lb/mmBtu) and dividing by 1,000,000 BTU/mmBtu and again by 2,000 lbs/ton.

i. Emission Limitations:
Sulfur dioxide (SO2) emissions shall not exceed 0.0006 lb/mmBtu of actual heat input when firing natural gas and 0.052 lb/mmBtu of actual heat input when firing number 2 distillate fuel oil.

Applicable Compliance Method:
When firing fuel oil, compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation.

When firing natural gas, compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6, while firing number 2 distillate fuel oil.

j. Emission Limitation:
Sulfur dioxide (SO2) emissions shall not exceed 22.82 tons/year when firing natural gas and/or number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance shall be demonstrated by summing the annual natural gas and number 2 distillate fuel oil emissions.

The annual natural gas emissions shall be determined by multiplying annual natural gas usage (cu ft/yr) by the heat content of the gas (Btu/cu ft) by the emission factor supplied by the boiler manufacturer (Nebraska Boiler Company, 08/28/2002) for SO2 in natural gas combustion (0.0006 lb/mmBtu) and dividing by 1,000,000 BTU/mmBtu and again by 2,000 lbs/ton.

The annual number 2 distillate fuel oil emissions shall be determined by multiplying annual number 2 distillate fuel oil usage (gal/yr) by the heat content of the oil (Btu/gal) by the emission factor supplied by the boiler manufacturer (Nebraska Boiler Company, 08/28/2002) for SO2 in number 2 distillate fuel oil combustion (0.052 lb/mmBtu) and dividing by 1,000,000 BTU/mmBtu and again by 2,000 lbs/ton.

k. Emission Limitation:
Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average when firing natural gas, except as provided by rule.

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

l. Emission Limitation:
Visible particulate emissions (PE) shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity when firing number 2 distillate fuel oil.

Applicable Compliance Method:
Compliance may be determined by data collected and recorded for the COM and, if required, by visible emissions observations.

g) Miscellaneous Requirements

(1) None.