Ohio Environmental Protection Agency

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

10/5/2015

Certified Mail

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

Mike Heise
The Medical Center Company
2250 Circle Drive
Cleveland, OH 44106-2664

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 1318003059
Permit Number: P0118533
Permit Type: OAC Chapter 3745-31 Modification
County: Cuyahoga

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA)Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

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

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

If you have any questions, please contact Cleveland Division of Air Quality at (216)664-2297 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

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

Cc: U.S. EPA
CDAQ; Pennsylvania; Canada

Ohio Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install
for
The Medical Center Company

Facility ID:	1318003059
Permit Number:	P0118533
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	10/5/2015
Effective:	10/5/2015

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
The Medical Center Company

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 8
9. Reporting Requirements 8
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 10
14. Public Disclosure 10
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 10
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 14
1. B014, #6 Natural gas/No.2 oil-fired boiler rated at 120.4 mmBtu/hr 15
2. B016, #5 Natural gas/No.2 oil-fired boiler rated at 122.9 mmBtu/hr 31
3. B022, #7 Natural gas/No.2 oil-fired boiler rated at 125.0 mmBtu/hr 47

Authorization

Facility ID:	1318003059
Facility Description:	Steam heat and hot/chilled water provider.
Application Number(s):	A0052453
Permit Number:	P0118533
Permit Description:	PTI Chapter 31 modification of three existing natural gas-fired boilers (emissions units B014, B016 and B022) to include No. 2 fuel oil. This Netting PTI is part of the Boiler Project at the Medical Center Company which involves the shutdown of the coal-fired boilers (emissions units B003 and B004).
Permit Type:	OAC Chapter 3745-31 Modification
Permit Fee:	$3,000.00
Issue Date:	10/5/2015
Effective Date:	10/5/2015

This document constitutes issuance to:

The Medical Center Company
2250 Circle Drive
Cleveland, OH 44106-2664

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

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

Cleveland Division of Air Quality
2nd Floor
75 ErieviewPlaza
Cleveland, OH 44114
(216)664-2297

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0118533
Permit Description: PTI Chapter 31 modification of three existing natural gas-fired boilers (emissions units B014, B016 and B022) to include No. 2 fuel oil. This Netting PTI is part of the Boiler Project at the Medical Center Company which involves the shutdown of the coal-fired boilers (emissions units B003 and B004).

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

Emissions Unit ID:	**B014**
Company Equipment ID:	Gas Boiler #6
Superseded Permit Number:	13-02233
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B016**
Company Equipment ID:	Gas Boiler #5
Superseded Permit Number:	13-03602
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B022**
Company Equipment ID:	Gas Boiler #7
Superseded Permit Number:	P0109036
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 of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

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

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

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

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

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

4. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

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

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Cleveland Division of Air Quality.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, 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 Cleveland Division of Air Quality. 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, andreportingrequirements contained in this permit shall be submitted to the Cleveland Division of Air Quality 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 theCleveland Division of Air Qualityin accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

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

6. Compliance Requirements

a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

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

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

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

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

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

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

c) The permittee shall submit progress reports to the Cleveland Division of Air Quality 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 Cleveland Division of Air Quality.

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 Cleveland Division of Air Quality. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s)not exempt from the requirement to obtain a Permit-to-Install.

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

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

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

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

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

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

Unless otherwise exempted,no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

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

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

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

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

   a) None.

2. The facility will be a major source of HAP emissions at the time of permit issuance. The requirements of either 40 CFR Part 63, Subpart DDDDD or Subpart JJJJJJ may be applicable to the new or modified emissions units, depending upon the major or area source status of the facility for HAPs emissions at the first substantive compliance date of 40 CFR Part 63, Subpart DDDDD (January 31st, 2017).

3. The permittee shall comply with the applicable provisions of the New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units, as promulgated by the United States Environmental Protection Agency under 40 CFR Part 60, Subpart Db. This NSPS rule applies to emissions units B014, B016, and B022.

4. The complete NSPS and MACT requirements, including the NSPS and MACT General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Cleveland Division of Air Quality.

5. Netting Demonstration:

   This air permit to install (PTI) is part of the Boiler Project at the Medical Center Company (MCCO) facility which involves the shutdown ofcoal fired boilers (emissions unit B003 and B004), installation of a new natural gas/ No. 2 fuel oil boiler (emissions unitB023)and the modification of three existing natural gas fired boilers (emissions units B014, B016 and B022) to include No. 2 fuel oil.

   The federally enforceable terms and conditions of this air permit-to-install (PTI) have been included for the purpose of Netting out of Non-Attainment New Source Review (NNSR) for nitrogen oxides (NO_x) and particulate ($PM_{2.5}$) emissions, and Netting out of Prevention of Significant Deterioration (PSD) for nitrogen oxides (NO_x) emissions.

   The other pollutants that are emitted (sulfur dioxide, PM_{10}, carbon monoxide, volatile organic compounds, and lead) were evaluated during the analysis; however, these pollutants did not exceed the significant threshold for this project in the first step for determining the amount of emission increase. Therefore, it was not necessary to include these pollutants in the second step of applying emission reduction credits for the shutdown of the coal boilers.

   Following the NSR definitions in OAC rule 3745-31-01(O), the baseline actual emissions were based on the average of the highest two consecutive years prior to the date of the original permit application for the Boiler Project, submitted February 24, 2015. The permittee used the ten year period of 2004 – 2014 to select the highest two-year average. The Netting analysis demonstrates that a significant net emissions increase of NO_x and $PM_{2.5}$, does not occur as a result of the boiler project after applying the contemporaneous emissions decrease from the shutdown of the coal boilers. Note that the net NO_x and $PM_{2.5}$ emissions are actually an emission decrease.

   A summary of the Netting analysis is provided in the table below. The complete Netting analysis is shown in the Permit Strategy Write-up that is included with the Draft permit.

Pollutant	Project emission increase, tpy	Baseline Actual Emissions for shutdown coal boilers, tpy	Project net emissions, tpy	Major NSR Significant emission rate, tpy
NO_x	70.66	201.88	-131.22	40
$PM_{2.5}$	10.03	15.23	-5.2	10

7. Upon the completion of installation or modification of emissions units B014, B016, B022 and B023, the coal boilers (B003 and B004) must be permanently removed from service by January 13, 2017.

   There will be a period of transition after the start up of the new boiler and prior to the existing coal boilers going offline. This time will be used for bringing the new and modified boilers up to normal operating conditions and will be referred to as the shakedown period. The permittee has agreed that the shakedown period for the new and modified boilers shall not exceed 180 operating days after initial start up. At the end of the shakedown period, the status will be changed to operational.

   The permittee has agreed to the following decommissioning schedule. Note: Once a coal boiler goes offline, it will only be brought back online if the new and modified boilers replacing them runs into unanticipated problems. The coal boilers and the new and modified boilers replacing them shall not operate simultaneously after the end of the 180-operating day shakedown period.

   The permittee shall permanently shut down the coal boilers no later than January 13, 2017 after the new boiler system becomes fully operational and has passed all compliance tests required by the permit-to-install.

C. Emissions Unit Terms and Conditions

1. B014, #6 Natural gas/No.2 oil-fired boiler rated at 120.4 mmBtu/hr

Operations, Property and/or Equipment Description:

100,000 lb/hr natural gas/No.2 oil-fired boiler rated at 120.4 mmBtu/hr heat input equipped with Low NO_x Burners (LNB)

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) b)(1)c., b)(2)b. and g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) June 30, 2008 ORC 3704.03(T)	Nitrogen oxide (NO_x) emissions shall not exceed 1.61 tons per month averaged over a 12-month rolling period. Carbon monoxide (CO) emissions shall not exceed 1.64 tons per month averaged over a 12-month rolling period.
b.	OAC rule 3745-31-05(A)(3) June 30, 2008 ORC 3704.03(T)	The total particulate emissions (including PM_{10}/$PM_{2.5}$) shall not exceed 0.23 ton per month averaged over a 12-month rolling period. Volatile organic compound (VOC) emissions shall not exceed 0.176 ton per month averaged over a 12-month rolling period. Sulfur dioxide (SO_2) emissions shall not exceed 0.099 ton per month averaged over a 12-month rolling period. See b)(2)a. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the total particulate and VOC emissions from this air contaminant source since the potential to emit is less than 10 tons per year. See b)(2)b. below.
d.	OAC rule 3745-31-05(D) Synthetic Minor and Netting to avoid PSD and NNSR.	Sulfur dioxide (SO_2) emissions shall not exceed 1.19 tons per rolling 12-month period. Nitrogen oxide (NO_x) emissions shall not exceed 19.28 tons per rolling 12-month period. Carbon monoxide (CO) emissions shall not exceed 19.66 tons per rolling 12-month period. The total particulate emissions (including PM_{10}/$PM_{2.5}$) shall not exceed 2.72 tons per rolling 12-month period. Volatile organic compounds (VOC) emissions shall not exceed 2.11 tons per rolling 12-month period. See c)(3) below.
e.	OAC rule 3745-17-07(A)	The visible particulate emissions limitation of this rule is less stringent than the visible particulate emissions limitation established in 40 CFR Part 60, Subpart Db.
f.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) shall not exceed 0.020 lb/mmBtu actual heat input.
g.	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	OAC rule 3745-110-03(C)	Natural gas: Nitrogen oxide (NO_x) emissions shall not exceed 0.10 lb/mmBtu. No.2 oil: Nitrogen oxide (NO_x) emissions shall not exceed 0.12 lb/mmBtu. Based on a 24 hour daily heat input-weighted average or a 30 day rolling heat input-weighted average emission rate from October 1st to April 30th.
i.	40 CFR Part 60 Subpart Db	Nitrogen oxide (NO_x) emissions shall not exceed 0.20 lb/mmBtuas a rolling, 30-day average. Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27%.
j.	40 CFR Part 63, Subpart JJJJJJ	See b)(2)e. below.

(2) Additional Terms and Conditions

a. These Best Available Technology (BAT) emission limits apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).

b. These requirements apply once U. S. EPA approves paragraph 3745-31-05(A)(3)(a)(ii) (less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c. The permittee shall maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative

accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

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

e. Provided that this emissions unit meets the definition of a “gas fired boiler”, as defined in 40 CFR Part 63.11237, this emissions unit is not subject to the requirements of this rule if fuel oil is only burned during periods of gas curtailment, gas supply emergencies, or periodic testing. Periodic testing of the fuel oil shall not exceed 48 hours during any calendar year.

c) Operational Restrictions

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

(2) The quality of the oil burned in this emissions unit shall meet a sulfur content that is less than or equal to 0.3% by weight which is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit. The fuel oil shall comply with the definition of “very low sulfur oil” contained in 40 CFR Part 60 Subpart Db.

d) Monitoring and/or Recordkeeping Requirements

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

(2) 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, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil

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

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

(3) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

(4) The permittee shall operate and maintain equipment to continuously monitor and record NO_x 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 NO_x monitoring system including, but not limited to:

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

b. emissions of NO_x in units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits or linearity checks;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

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

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; as well as,

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

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

(5) The permittee shall maintain monthly records of the operating hours while burning No.2 fuel oil.

(6) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 60, Subpart Db, including the following sections:

Applicable Rule	Requirement
60.48b(b), (c), (d), (e), (f) and (g)	Monitoring requirements for nitrogen oxides
60.49b (d)(1)	Maintain records of fuels
60.49b (f)	Maintain records of opacity
60.49b (g)	Maintain records of NO_x emissions
60.49b (o)	Maintain records for 2 years
60.49b (r)	Maintain fuel records or develop fuel analysis plan

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify each day when a fuel other than natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(2) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify :

a. any exceedance of the allowable sulfur dioxide emission limitation, pounds sulfur dioxide/MMBtu actual heat input; and

b. any deviation from the maximum % sulfur content, by weight, limitation on the No.2 fuel oil.

The deviation (excursion) reports shall be submitted within 30 days after the deviation occurs.

(3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x 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 NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-110, 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 31, April 30, July 31 and October 31 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

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

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

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

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

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

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

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

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

* 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

(4) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subpart Db, including the following sections:

Applicable Rule	Requirement
60.49b(a)	Notification of initial start up
60.49b(b)	Submit performance test data for NO_x
60.49b(h)	Submit excess emission reports for NO_x
60.49b(v)	Electronic report submittal
60.49b(w)	Reports required for each 6-month period

(5) Pursuant to the NSPS, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):

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 the Cleveland Division of Air Quality (Cleveland DAQ) and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
Lazarus Government Center
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

(6) Simultaneous to beginning operation (following a reasonable shakedown period) of emissions units B014, B016, B022 and B023, the permittee shall submit a notification documenting the shutdown dates for emissions units B003 and B004.

f) Testing Requirements

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

a. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 1.61 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.116 mmcf/hr) by the boiler manufacturer emission factor for NO_x emissions (0.036 lb of NO_x/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (860 gallons/hr) by the boiler manufacturer emission factor for NO_x emissions (0.109 lb of NO_x/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(4) of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period and divide by 12 months for the monthly average.

b. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 1.64 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.116 mmcf/hr) by the boiler manufacturer emission factor for CO emissions (0.037 lb of CO/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (860 gallons/hr) by the boiler manufacturer emission factor for CO emissions (0.059 lb of CO/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

c. Emission Limitation:

The total particulate emissions (including $PM_{10}/PM_{2.5}$) shall not exceed 0.23 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.116 mmcf/hr) by the boiler manufacturer emission factor for particulate emissions (0.005 lb of PE/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (860 gallons/hr) by the boiler manufacturer emission factor for particulate emissions (0.03 lb of PE/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

d. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 0.175 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.116 mmcf/hr) by the boiler manufacturer emission factor for VOC emissions (0.004 lb of VOC/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (860 gallons/hr) by the boiler manufacturer emission factor for VOC emissions (0.004 lb of VOC/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

e. Emission Limitation:

Sulfur dioxide (SO_2) emissions shall not exceed 0.099 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.116 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for SO_2 emissions (0.6 lb of SO_2/mmcf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (860 gallons/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3-1, Table 1.3-1 (05/10) emission factor for SO_2 emissions (142S lbs of SO_2/1,000 gallons where S = the % sulfur in the No.2 fuel (0.3%)), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

f. Emission Limitation:

Sulfur dioxide (SO_2) emissions shall not exceed 1.19 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(2) and d)(5) and using the calculations identified in f)(1)e. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

g. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 19.28 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(4) of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

h. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 19.66 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(5) and using the calculations identified in f)(1)b. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

i. Emission Limitation:

The total particulate emissions (including $PM_{10}/PM_{2.5}$) shall not exceed 2.72 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(5) and using the calculations identified in f)(1)c. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

j. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 2.11 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(5) and using the calculations identified in f)(1)d. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

k. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

When burning natural gas, compliance with the lb/mmBtu emission limitation may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.116 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for particulates (1.9 lbs/mmcf) and dividing by the maximum hourly heat input capacity of the emissions unit (119.8 mmBtu/hr).

When burning No.2 fuel oil, compliance with the lb/mmBtu emission limitation may be determined by multiplying the maximum fuel oil capacity of the emissions unit (860 gallons/hr) by the AP-42 emission factor for No. 2 fuel oil (2.0 lbs of particulates/1,000 gallons - Section 1.3-12, Table 1.3.1 (05/10)), and dividing by the maximum hourly heat input capacity of the emissions unit (119.8 mmBtu/hr).

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 5 and 19.

l. Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.6lbs/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received, or each daily composite sample of the oil burned during each calendar day, meets the limitation in accordance with d)(2).

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.

m. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed the following limitations:

Natural gas:

Nitrogen oxide (NO_x) emissions shall not exceed 0.10 lb/mmBtu based on a 24 hour daily heat input-weighted average or a 30 day rolling heat input-weighted average emission rate from October 1st to April 30th.

No.2 oil:

Nitrogen oxide (NO_x) emissions shall not exceed 0.12 lb/mmBtu based on a 24 hour daily heat input-weighted average or a 30 day rolling heat input-weighted average emission rate from October 1st to April 30th.

Applicable Compliance Method:

Ongoing compliance with the NO_x emissions limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in d)(4) of the monitoring and record keeping section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7, 7A, 7C, 7D, or 7E, and any additional approved USEPA methods as applicable.

n. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 0.20 lb/mmBtu as a rolling, 30-day average.

Applicable Compliance Method:

For the initial compliance test, nitrogen oxides from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the nitrogen oxides emission limit. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period in units of lb/mmBtu. Following the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NO_X standards in 40 CFR 60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NO_X emissions data collected pursuant to 40 CFR 60.48b(g)(1) or 40 CFR 60.48b(g)(2) are used to

calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_X emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_X emission data for the preceding 30 steam generating unit operating days.

Ongoing compliance with the NO_x emissions limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in d)(4) and d)(6) of the monitoring and record keeping section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7, 7A, 7C, 7D, or 7E, and any additional approved USEPA methods as applicable.

o. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method:

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 40 CFR Part 60.48b(a). The permittee shall also comply with the requirements of f)(2) below.

(2) The permittee shall comply with the applicable compliance requirements and testing requirements required under 40 CFR Part 60, Subpart Db, including the following sections:

Applicable Rule	Requirement
60.46b(c)	Compliance and performance test methods and procedures for nitrogen oxides
60.46b(d)	Initial test for opacity
60.46b(e)	Performance test for NO_x

(3) Within 60 days of achieving the maximum production rate at which the emissions unit(s) will be operated, but not later than 180 days after initial startup, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 2; 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 continuous NO_x 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 2; and ORC section 3704.03(I).

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

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

2. B016, #5 Natural gas/No.2 oil-fired boiler rated at 122.9 mmBtu/hr

Operations, Property and/or Equipment Description:

100,000 lb/hr natural gas/No.2 oil-fired boiler rated at 122.9 mmBtu/hr heat input equipped with Low NO_x Burners (LNB) and an oxygen (O_2) trim system

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) b)(1)c., b)(2)b. and g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) June 30, 2008 ORC 3704.03(T)	Nitrogen oxide (NO_x) emissions shall not exceed 1.64 tons per month averaged over a 12-month rolling period. Carbon monoxide (CO) emissions shall not exceed 1.675 tons per month averaged over a 12-month rolling period.
b.	OAC rule 3745-31-05(A)(3) June 30, 2008 ORC 3704.03(T)	The total particulate emissions (including PM_{10}/$PM_{2.5}$) shall not exceed 0.23 ton per month averaged over a 12-month rolling period. Volatile organic compound (VOC) emissions shall not exceed 0.18 ton per month averaged over a 12-month rolling period. Sulfur dioxide (SO_2) emissions shall not exceed 0.10 ton per month averaged over a 12-month rolling period. See b)(2)a. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the total particulate and VOC emissions from this air contaminant source since the potential to emit is less than 10 tons per year. See b)(2)b. below.
d.	OAC rule 3745-31-05(D) Synthetic Minor and Netting to avoid PSD and NNSR.	Sulfur dioxide (SO_2) emissions shall not exceed 1.21 tons per rolling 12-month period. Nitrogen oxide (NO_x) emissions shall not exceed 19.68 tons per rolling 12-month period. Carbon monoxide (CO) emissions shall not exceed 20.10 tons per rolling 12-month period. The total particulate emissions (including PM_{10}/$PM_{2.5}$) shall not exceed 2.76 tons per rolling 12-month period. Volatile organic compounds (VOC) emissions shall not exceed 2.16 tons per rolling 12-month period. See c)(3) below.
e.	OAC rule 3745-17-07(A)	The visible particulate emissions limitation of this rule is less stringent than the visible particulate emissions limitation established in 40 CFR Part 60, Subpart Db.
f.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) shall not exceed 0.020 lb/mmBtu actual heat input.
g.	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	OAC rule 3745-110-03(C)	Natural gas: Nitrogen oxide (NO_x) emissions shall not exceed 0.10 lb/mmBtu. No.2 oil: Nitrogen oxide (NO_x) emissions shall not exceed 0.12 lb/mmBtu. Based on a 24 hour daily heat input-weighted average or a 30 day rolling heat input-weighted average emission rate from October 1st to April 30th.
i.	40 CFR Part 60 Subpart Db	Nitrogen oxide (NO_x) emissions shall not exceed 0.20 lb/mmBtuas a rolling, 30-day average. Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27%.
j.	40 CFR Part 63, Subpart JJJJJJ	See b)(2)e. below.

(2) Additional Terms and Conditions

a. These Best Available Technology (BAT) emission limits apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).

b. These requirements apply once U. S. EPA approves paragraph 3745-31-05(A)(3)(a)(ii) (less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c. The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system, designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. 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.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative

accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

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

e. Provided that this emissions unit meets the definition of a “gas fired boiler”, as defined in 40 CFR Part 63.11237, this emissions unit is not subject to the requirements of this rule if fuel oil is only burned during periods of gas curtailment, gas supply emergencies, or periodic testing. Periodic testing of the fuel oil shall not exceed 48 hours during any calendar year.

c) Operational Restrictions

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

(2) The quality of the oil burned in this emissions unit shall meet a sulfur content that is less than or equal to 0.3% by weight which is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit. The fuel oil shall comply with the definition of “very low sulfur oil” contained in 40 CFR Part 60 Subpart Db.

d) Monitoring and/or Recordkeeping Requirements

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

(2) 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, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil

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

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

(3) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

(4) The permittee shall operate and maintain equipment to continuously monitor and record NO_x 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 NO_x monitoring system including, but not limited to:

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

b. emissions of NO_x in units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits or linearity checks;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

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

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; as well as,

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

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

(5) The permittee shall maintain monthly records of the operating hours while burning No.2 fuel oil.

(6) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 60, Subpart Db, including the following sections:

Applicable Rule	Requirement
60.48b(b), (c), (d), (e), (f) and (g)	Monitoring requirements for nitrogen oxides
60.49b (d)(1)	Maintain records of fuels
60.49b (f)	Maintain records of opacity
60.49b (g)	Maintain records of NO_x emissions
60.49b (o)	Maintain records for 2 years
60.49b (r)	Maintain fuel records or develop fuel analysis plan

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify each day when a fuel other than natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(2) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify :

a. any exceedance of the allowable sulfur dioxide emission limitation, pounds sulfur dioxide/MMBtu actual heat input; and

b. any deviation from the maximum % sulfur content limitation, by weight, of the No.2 fuel oil.

The deviation (excursion) reports shall be submitted within 30 days after the deviation occurs.

(3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x 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 NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-110, 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 31, April 30, July 31, and October 31 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

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

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

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

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

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

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

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

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

* 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

(4) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subpart Db, including the following sections:

Applicable Rule	Requirement
60.49b(a)	Notification of initial start up
60.49b(b)	Submit performance test data for NO_x
60.49b(h)	Submit excess emission reports for NO_x
60.49b(v)	Electronic report submittal
60.49b(w)	Reports required for each 6-month period

(5) Pursuant to the NSPS, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):

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 the Cleveland Division of Air Quality (Cleveland DAQ) and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
Lazarus Government Center
51 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

(6) Simultaneous to beginning operation (following a reasonable shakedown period) of emissions units B014, B016, B022 and B023, the permittee shall submit a notification documenting the shutdown dates for emissions units B003 and B004.

f) Testing Requirements

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

a. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 1.64 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.118 mmcf/hr) by the boiler manufacturer emission factor for NO_x emissions (0.036 lb of NO_x/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (877.9 gallons/hr) by the boiler manufacturer emission factor for NO_x emissions (0.109 lb of NO_x/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(4) of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period and divide by 12 months for the monthly average.

b. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 1.675 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.118 mmcf/hr) by the boiler manufacturer emission factor for CO emissions (0.037 lb of CO/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (877.9 gallons/hr) by the boiler manufacturer emission factor for CO emissions (0.059 lb of CO/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

c. Emission Limitation:

The total particulate emissions (including $PM_{10}/PM_{2.5}$) shall not exceed 0.23 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.118 mmcf/hr) by the boiler manufacturer emission factor for particulate emissions (0.005 lb of PE/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (877.9 gallons/hr) by the boiler manufacturer emission factor for particulate emissions (0.03 lb of PE/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

d. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 0.18 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.118 mmcf/hr) by the boiler manufacturer emission factor for VOC emissions (0.004 lb of VOC/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (877.9 gallons/hr) by the boiler manufacturer emission factor for VOC emissions (0.004 lb of VOC/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

e. Emission Limitation:

Sulfur dioxide (SO_2) emissions shall not exceed 0.10 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.118 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for SO_2 emissions (0.6 lb of SO_2/mmcf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (877.9 gallons/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3-1, Table 1.3-1 (05/10) emission factor for SO_2 emissions (142S lbs of SO_2/1,000 gallons where S = the % sulfur in the No.2 fuel (0.3%)), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

f. Emission Limitation:

Sulfur dioxide (SO_2) emissions shall not exceed 1.21 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(2) and d)(5) and using the calculations identified in f)(1)e. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

g. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 19.68 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(4) of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

h. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 20.10 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(5) and using the calculations identified in f)(1)b. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

i. Emission Limitation:

The total particulate emissions (including $PM_{10}/PM_{2.5}$) shall not exceed 2.76 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(5) and using the calculations identified in f)(1)c. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

j. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 2.16 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(5) and using the calculations identified in f)(1)d. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

k. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

When burning natural gas, compliance with the lb/mmBtu emission limitation may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.118 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for particulates (1.9 lbs/mmcf) and dividing by the maximum hourly heat input capacity of the emissions unit (119.8 mmBtu/hr).

When burning No.2 fuel oil, compliance with the lb/mmBtu emission limitation may be determined by multiplying the maximum fuel oil capacity of the emissions unit (877.9 gallons/hr) by the AP-42 emission factor for No.2 fuel oil (2.0 lbs of particulates/1,000 gallons - Section 1.3-12, Table 1.3.1 (05/10)), and dividing by the maximum hourly heat input capacity of the emissions unit (119.8 mmBtu/hr).

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 5 and 19.

l. Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.6lbs/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received, or each daily composite sample of the oil burned during each calendar day, meets the limitation in accordance with d)(2).

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.

m. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed the following limitations:

Natural gas:

Nitrogen oxide (NO_x) emissions shall not exceed 0.10 lb/mmBtu based on a 24 hour daily heat input-weighted average or a 30 day rolling heat input-weighted average emission rate from October 1st to April 30th.

No.2 oil:

Nitrogen oxide (NO_x) emissions shall not exceed 0.12 lb/mmBtu based on a 24 hour daily heat input-weighted average or a 30 day rolling heat input-weighted average emission rate from October 1st to April 30th.

Applicable Compliance Method:

Ongoing compliance with the NO_x emissions limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in d)(4) of the monitoring and record keeping section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7, 7A, 7C, 7D, or 7E, and any additional approved USEPA methods as applicable.

n. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 0.20 lb/mmBtu as a rolling, 30-day average.

Applicable Compliance Method:

For the initial compliance test, nitrogen oxides from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the nitrogen oxides emission limit. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period in units of lb/mmBtu. Following the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NO_X standards in 40 CFR 60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NO_X emissions data collected pursuant to 40 CFR 60.48b(g)(1) or 40 CFR 60.48b(g)(2) are used to

calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_X emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_X emission data for the preceding 30 steam generating unit operating days.

Ongoing compliance with the NO_x emissions limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in d)(4) and d)(6) of the monitoring and record keeping section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7, 7A, 7C, 7D, or 7E, and any additional approved USEPA methods as applicable.

o. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method:

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 40 CFR Part 60.48b(a). The permittee shall also comply with the requirements of f)(2) below.

(2) The permittee shall comply with the applicable compliance requirements and testing requirements required under 40 CFR Part 60, Subpart Db, including the following sections:

Applicable Rule	Requirement
60.46b(c)	Compliance and performance test methods and procedures for nitrogen oxides
60.46b(d)	Initial test for opacity
60.46b(e)	Performance test for NO_x

(3) Within 60 days of achieving the maximum production rate at which the emissions unit(s) will be operated, but not later than 180 days after initial startup, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 2; 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 continuous NO_x 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 2; and ORC section 3704.03(I).

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

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

3. B022, #7 Natural gas/No.2 oil-fired boiler rated at 125.0 mmBtu/hr

Operations, Property and/or Equipment Description:

100,000 lb/hr natural gas/No.2 oil-fired boiler equipped with Low-NOx burners, FGR, economizer and an oxygen (O_2) trim system rated at 125 mmBtu/hr

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

(1) b)(1)c., b)(2)b. and g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) June 30, 2008 ORC 3704.03(T)	Nitrogen oxide (NO_x) emissions shall not exceed 1.67 tons per month averaged over a 12-month rolling period. Carbon monoxide (CO) emissions shall not exceed 1.71 tons per month averaged over a 12-month rolling period.
b.	OAC rule 3745-31-05(A)(3) June 30, 2008 ORC 3704.03(T)	The total particulate emissions (including PM_{10}/$PM_{2.5}$) shall not exceed 0.24 ton per month averaged over a 12-month rolling period. Volatile organic compound (VOC) emissions shall not exceed 0.183 ton per month averaged over a 12-month rolling period. Sulfur dioxide (SO_2) emissions shall not exceed 0.102 ton per month averaged over a 12-month rolling period. See b)(2)a. below.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the total particulate and VOC emissions from this air contaminant source since the potential to emit is less than 10 tons per year. See b)(2)b. below.
d.	OAC rule 3745-31-05(D) Synthetic Minor and Netting to avoid PSD and NNSR.	Sulfur dioxide (SO_2) emissions shall not exceed 1.22 tons per rolling 12-month period. Nitrogen oxide (NO_x) emissions shall not exceed 20.04 tons per rolling 12-month period. Carbon monoxide (CO) emissions shall not exceed 20.46 tons per rolling 12-month period. The total particulate emissions (including PM_{10}/$PM_{2.5}$) shall not exceed 2.85 tons per rolling 12-month period. Volatile organic compounds (VOC) emissions shall not exceed 2.20 tons per rolling 12-month period. See c)(3) below.
e.	OAC rule 3745-17-07(A)	The visible particulate emissions limitation of this rule is less stringent than the visible particulate emissions limitation established in 40 CFR Part 60, Subpart Db.
f.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) shall not exceed 0.020 lb/mmBtu actual heat input.
g.	OAC rule 3745-18-06(D)	Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
h.	OAC rule 3745-110-03(C)	Natural gas: Nitrogen oxide (NO_x) emissions shall not exceed 0.10 lb/mmBtu. No.2 oil: Nitrogen oxide (NO_x) emissions shall not exceed 0.12 lb/mmBtu. Based on a 24 hour daily heat input-weighted average or a 30 day rolling heat input-weighted average emission rate from October 1st to April 30th.
i.	40 CFR Part 60 Subpart Db	Nitrogen oxide (NO_x) emissions shall not exceed 0.20 lb/mmBtuas a rolling, 30-day average. Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27%.
j.	40 CFR Part 63, Subpart JJJJJJ	See b)(2)e. below.

(2) Additional Terms and Conditions

a. These Best Available Technology (BAT) emission limits apply until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).

b. These requirements apply once U. S. EPA approves paragraph 3745-31-05(A)(3)(a)(ii) (less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c. The permittee shall maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative

accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

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

e. Provided that this emissions unit meets the definition of a “gas fired boiler”, as defined in 40 CFR Part 63.11237, this emissions unit is not subject to the requirements of this rule if fuel oil is only burned during periods of gas curtailment, gas supply emergencies, or periodic testing. Periodic testing of the fuel oil shall not exceed 48 hours during any calendar year.

c) Operational Restrictions

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

(2) The quality of the oil burned in this emissions unit shall meet a sulfur content that is less than or equal to 0.3% by weight which is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit. The fuel oil shall comply with the definition of “very low sulfur oil” contained in 40 CFR Part 60 Subpart Db.

d) Monitoring and/or Recordkeeping Requirements

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

(2) 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, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil

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

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

(3) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

(4) The permittee shall operate and maintain equipment to continuously monitor and record NO_x 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 NO_x monitoring system including, but not limited to:

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

b. emissions of NO_x in units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits or linearity checks;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

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

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; as well as,

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

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

(5) The permittee shall maintain monthly records of the operating hours while burning No.2 fuel oil.

(6) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 60, Subpart Db, including the following sections:

Applicable Rule	Requirement
60.48b(b), (c), (d), (e), (f) and (g)	Monitoring requirements for nitrogen oxides
60.49b (d)(1)	Maintain records of fuels
60.49b (f)	Maintain records of opacity
60.49b (g)	Maintain records of NO_x emissions
60.49b (o)	Maintain records for 2 years
60.49b (r)	Maintain fuel records or develop fuel analysis plan

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify each day when a fuel other than natural gas and/or number two fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(2) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify:

a. any exceedance of the allowable sulfur dioxide emission limitation, pounds sulfur dioxide/MMBtu actual heat input; and

b. any deviation from the maximum % sulfur content limitation, by weight, of the No.2 fuel oil.

The deviation (excursion) reports shall be submitted within 30 days after the deviation occurs.

(3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x 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 NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-110, 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 31, April 30, July 31, and October 31 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

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

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

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

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

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

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

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

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

* 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

(4) The permittee shall comply with the applicable reporting requirements required under 40 CFR Part 60, Subpart Db, including the following sections:

Applicable Rule	Requirement
60.49b(a)	Notification of initial start up
60.49b(b)	Submit performance test data for NO_x
60.49b(h)	Submit excess emission reports for NO_x
60.49b(v)	Electronic report submittal
60.49b(w)	Reports required for each 6-month period

(5) Pursuant to the NSPS, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):

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 the Cleveland Division of Air Quality (Cleveland DAQ) and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
Lazarus Government Center
52 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

(6) Simultaneous to beginning operation (following a reasonable shakedown period) of emissions units B014, B016, B022 and B023, the permittee shall submit a notification documenting the shutdown dates for emissions units B003 and B004.

f) Testing Requirements

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

a. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 1.67 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.120 mmcf/hr) by the boiler manufacturer emission factor for NO_x emissions (0.036 lb of NO_x/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (892.9 gallons/hr) by the boiler manufacturer emission factor for NO_x emissions (0.109 lb of NO_x/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(4) of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period and divide by 12 months for the monthly average.

b. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 1.71 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.120 mmcf/hr) by the boiler manufacturer emission factor for CO emissions (0.037 lb of CO/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (892.9 gallons/hr) by the boiler manufacturer emission factor for CO emissions (0.059 lb of CO/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

c. Emission Limitation:

The total particulate emissions (including $PM_{10}/PM_{2.5}$) shall not exceed 0.24 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.120 mmcf/hr) by the boiler manufacturer emission factor for particulate emissions (0.005 lb of PE/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (892.9 gallons/hr) by the boiler manufacturer emission factor for particulate emissions (0.03 lb of PE/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

d. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 0.183 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.120 mmcf/hr) by the boiler manufacturer emission factor for VOC emissions (0.004 lb of VOC/mmBtu), the heat content of natural gas (1,040 Btu/cf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (892.9 gallons/hr) by the boiler manufacturer emission factor for VOC emissions (0.004 lb of VOC/mmBtu), the heat content of No.2 oil (0.14 mmBtu/gallon), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

e. Emission Limitation:

Sulfur dioxide (SO_2) emissions shall not exceed 0.102 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

The monthly average emissions limitation was established by multiplying the maximum hourly natural gas usage rate (0.120 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for SO_2 emissions (0.6 lb of SO_2/mmcf), the maximum operating hours of the emissions unit while burning natural gas (8,760 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions limitation was established by multiplying the maximum hourly No.2 oil usage rate (892.9 gallons/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.3-1, Table 1.3-1 (05/10) emission factor for SO_2 emissions (142S lbs of SO_2/1,000 gallons where S = the % sulfur in the No.2 fuel (0.3%)), the annual operating hours restriction of the emissions unit while burning No.2 oil (48 hrs), dividing by 2,000 lbs/ton and divide by 12 months.

The monthly average emissions from both fuels are summed to obtain the total ton per month emission rate based on the actual operating hours for each type of fuel.

f. Emission Limitation:

Sulfur dioxide (SO_2) emissions shall not exceed 1.22 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(2) and d)(5) and using the calculations identified in f)(1)e. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

g. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 20.04 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(4) of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

h. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 20.46 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(5) and using the calculations identified in f)(1)b. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

i. Emission Limitation:

The total particulate emissions (including $PM_{10}/PM_{2.5}$) shall not exceed 2.85 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(5) and using the calculations identified in f)(1)c. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

j. Emission Limitation:

Volatile organic compound (VOC) emissions shall not exceed 2.20 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance with this annual limitation shall be based on the record keeping requirements specified in d)(5) and using the calculations identified in f)(1)d. of this permit and shall be the sum of the monthly emission rates for each rolling, 12-month period.

k. Emission Limitation:

Particulate emissions (PE) shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

When burning natural gas, compliance with the lb/mmBtu emission limitation may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.120 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition Compilation of Air Pollution Emission Factors Section 1.4 Table 1.4-2(7/98) emission factor for particulates (1.9 lbs/mmcf) and dividing by the maximum hourly heat input capacity of the emissions unit (119.8 mmBtu/hr).

When burning No.2 fuel oil, compliance with the lb/mmBtu emission limitation may be determined by multiplying the maximum fuel oil capacity of the emissions unit (892.9 gallons/hr) by the AP-42 emission factor for No.2 fuel oil (2.0 lbs of particulates/1,000 gallons - Section 1.3-12, Table 1.3.1 (05/10)), and dividing by the maximum hourly heat input capacity of the emissions unit (119.8 mmBtu/hr).

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 5 and 19.

l. Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.6lbs/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received, or each daily composite sample of the oil burned during each calendar day, meets the limitation in accordance with d)(2).

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.

m. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed the following limitations:

Natural gas:

Nitrogen oxide (NO_x) emissions shall not exceed 0.10 lb/mmBtu based on a 24 hour daily heat input-weighted average or a 30 day rolling heat input-weighted average emission rate from October 1st to April 30th.

No.2 oil:

Nitrogen oxide (NO_x) emissions shall not exceed 0.12 lb/mmBtu based on a 24 hour daily heat input-weighted average or a 30 day rolling heat input-weighted average emission rate from October 1st to April 30th.

Applicable Compliance Method:

Ongoing compliance with the NO_x emissions limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in d)(4) of the monitoring and record keeping section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7, 7A, 7C, 7D, or 7E, and any additional approved USEPA methods as applicable.

n. Emission Limitation:

Nitrogen oxide (NO_x) emissions shall not exceed 0.20 lb/mmBtu as a rolling, 30-day average.

Applicable Compliance Method:

For the initial compliance test, nitrogen oxides from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the nitrogen oxides emission limit. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period in units of lb/mmBtu. Following the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NO_X standards in 40 CFR 60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NO_X emissions data collected pursuant to 40 CFR 60.48b(g)(1) or 40 CFR 60.48b(g)(2) are used to

calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_X emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_X emission data for the preceding 30 steam generating unit operating days.

Ongoing compliance with the NO_x emissions limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in d)(4) and d)(6) of the monitoring and record keeping section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

If required, the permittee shall demonstrate compliance with the emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7, 7A, 7C, 7D, or 7E, and any additional approved USEPA methods as applicable.

o. Emission Limitation:

Visible particulate emissions shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method:

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 40 CFR Part 60.48b(a). The permittee shall also comply with the requirements of f)(2) below.

(2) The permittee shall comply with the applicable compliance requirements and testing requirements required under 40 CFR Part 60, Subpart Db, including the following sections:

Applicable Rule	Requirement
60.46b(c)	Compliance and performance test methods and procedures for nitrogen oxides
60.46b(d)	Initial test for opacity
60.46b(e)	Performance test for NO_x

(3) Within 60 days of achieving the maximum production rate at which the emissions unit(s) will be operated, but not later than 180 days after initial startup, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 2; 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 continuous NO_x 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 2; and ORC section 3704.03(I).

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

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.