

7/6/2012

Certified Mail

Facility ID: 1409090081  
Permit Number: P0097324  
County: Butler

Daniel Fetrow  
Miami University  
Environmental Health & Safety Offices  
55 Hughes Hall  
Oxford, OH 45056

RE: DRAFT AIR POLLUTION TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Journal News. A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

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

and Southwest Ohio Air Quality Agency  
250 William Howard Taft Rd.  
Cincinnati, OH 45219

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Southwest Ohio Air Quality Agency at (513)946-7777.

Sincerely,

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

Cc: U.S. EPA Region 5 -Via E-Mail Notification  
SWOAQA; Indiana; Kentucky



PUBLIC NOTICE  
7/6/2012 Issuance of Draft Air Pollution Title V Permit

Miami University  
Cole Service Building, Oxford Campus  
Oxford, OH 45056  
Butler County

FACILITY DESC.: Colleges, Universities, and Professional Schools

PERMIT #: P0097324

PERMIT TYPE: Renewal

PERMIT DESC: Renewal Title V for Miami University, which consists a number of coal, fuel oil, natural gas boilers and natural gas and diesel engines that provide heat, electricity, and steam to the university along with a spray booth, laboratory hoods, an incinerator, coal storage piles, fuel oil storage tanks that are located through out the university's property.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitonline.aspx> by entering the permit # or: Paul Tedtman, Southwest Ohio Air Quality Agency, 250 William Howard Taft Rd., Cincinnati, OH 45219. Ph: (513)946-7777





## Statement of Basis For Air Pollution Title V Permit

Facility ID:	1409090081
Facility Name:	Miami University
Facility Description:	University Campus and Power Plant
Facility Address:	Cole Service Building, Oxford, OH 45056
Permit #:	P0097324, Renewal
<p>This facility is subject to Title V because it is major for:</p> <p> <input type="checkbox"/> Lead    <input checked="" type="checkbox"/> Sulfur Dioxide    <input type="checkbox"/> Carbon Monoxide    <input type="checkbox"/> Volatile Organic Compounds    <input type="checkbox"/> Nitrogen Oxides  <input type="checkbox"/> Particulate Matter ≤ 10 microns    <input type="checkbox"/> Single Hazardous Air Pollutant    <input type="checkbox"/> Combined Hazardous Air Pollutants  <input checked="" type="checkbox"/> Maximum Available Control Technology Standard(s) </p>	

### A. Standard Terms and Conditions

Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01 (U)?	Yes
Were there any <input type="checkbox"/> common control <input type="checkbox"/> issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them.	No
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E)	N/A



**B. Facility-Wide Terms and Conditions**

Term and Condition (paragraph)	Basis		<u>Comments</u>
	SIP (3745- )	Other	
B.2.	77-03(A)		Listing of insignificant emission units.
B.3		40 CFR Part 63, subpart DDDDD	<p>Boiler MACT terms and conditions</p> <p>The Clean Air Act (CAA) requires U.S. EPA to develop rules to reduce air toxics emissions from categories of facilities that emit one or more of 187 listed air toxic pollutants. These rules require the application of emissions limits based on Maximum Achievable Control Technology (MACT). The U.S. EPA identified industrial boilers, commercial and institutional boilers, and process heaters as categories of major sources for which emission standards must be developed.</p> <p>Industrial boilers, commercial and institutional boilers, and process heaters located at a major source facility (a facility that emits or has the potential to emit 10 or more tons per year (TPY) of a single air toxic or 25 TPY or more of any combination of air toxics) were subject to a case-by-case MACT determination pursuant to section 112(j) of the CAA due to the June 8, 2007 D.C. Circuit Court of Appeals decision to vacate the Boiler MACT (40 CFR Part 63, Subpart DDDDD).</p> <p>On March 21, 2011, U.S. EPA published the final rule of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) in the Federal Register. At the same time, U.S. EPA published an announcement in the Federal Register that they would be reconsidering certain aspects of the final rule.</p> <p>On May 18, 2011, U.S. EPA published a delay notice (“Stay”) of the effective dates for the final rule of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and</p>



Institutional Boilers and Process Heaters (40 CFR Part 63, Subpart DDDDD) which were published in the Federal Register on March 21, 2011. Under this Stay, the effective dates of the final rule were delayed until the proceedings for judicial review were completed or U.S. EPA completed its reconsideration of the rule, whichever was earlier, and the Agency published a notice in the Federal Register announcing that the rules were in effect.

On January 9, 2012, the United States District Court for the District of Columbia vacated the U.S. EPA's delay notice as unlawful and remanded the delay notice back to U.S. EPA for further proceedings. Based upon the Court's action, the Stay was no longer and the final rule as published on March 21, 2011, became effective rule as of May 20, 2011, for all new and existing sources subject to 40 CFR Part 63, Subpart DDDDD.

On February 7, 2012, U.S. EPA issued a no action assurance letter informing sources that U.S. EPA will not enforce any of the administrative notification requirements for new or existing boilers in the 2011 rules for a period of time while U.S. EPA works to take final action on the proposal to reset these dates. For existing boilers, these administrative notification requirements are the only obligations sources would otherwise have under the 2011 rules prior to when the U.S. EPA intends to finalize the reconsideration process. The Final reconsideration rule is expected to be promulgated by June, 2012.



**C. Emissions Unit Terms and Conditions**

Key: EU = emissions unit ID ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit) OR = operational restriction M = monitoring requirements St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement ENF = did noncompliance issues drive the monitoring requirements? R = record keeping requirements Rp = reporting requirements ET = emission testing requirements (not including compliance method terms) Misc = miscellaneous requirements															
EU(s)	Limitation	Basis		ND	OR	M	St	ENF	R	St	Rp	St	ET	Misc	Comments
		SIP (3745- )	Other												
B010	When burning natural gas: 0.02 lb/MMBtu PE and PM <sub>10</sub> ; 0.0006 lb/MMBtu SO <sub>2</sub> ; 0.10 lb/MMBtu NO <sub>x</sub> ; 0.035 lb/MMBtu CO; 0.0028 lb/MMBtu VOC		3745-31-05(A)(3)	No	No	No	No	No	No	No	No	No	No	No	OR, M, R, Rp, ET - The lb/MMBTU emission limitations are based on the EU's potential to emit.
B010	When burning No. 2 fuel oil: 0.02 lb/MMBtu PE and PM <sub>10</sub> ; 0.30 lb/MMBtu SO <sub>2</sub> ; 0.15 lb/MMBtu NO <sub>x</sub> ; 0.036 lb/MMBtu CO; 0.001 lb/MMBtu VOC		3745-31-05(A)(3)	No	No	Yes	No	No	Yes	No	Yes	No	No	No	OR, ET - The lb/MMBTU emission limitations are based on the EU's potential to emit.



B010	When burning any combination of natural gas, No. 2 fuel oil, and coal: 8.47 TPY PE and PM <sub>10</sub> ; 64.45 TPY SO <sub>2</sub> ; 16.52 TPY NO <sub>x</sub> ; 13.22 TPY CO; 0.15 TPY VOC		3745-31-05(D)	No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	OR – Fuel usage limitations ET – Compliance with the TPY limitations will be demonstrated by compliance with the fuel usage limitations.
B010	20% opacity as a six-minute average	17-07(A)(1)		No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	OR, ET – Compliance will be demonstrated by the operation of a certified continuous opacity monitoring system (COMS).
B010	0.02 lb/MMBtu PE	17-10(B)(1)		No	Yes	Yes	Yes	No	Yes	No	Yes	No	No	No	ST – Less stringent than 31-05(A)(3) ET – Compliance determined by record keeping of fuel analyses.
B010, B011, B012	0.146 lb/MMBtu PE when burning coal	17-10(C)(1)		No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	OR, ET – Compliance will be demonstrated by the operation of a baghouse and COMS
B010, B011, B012, B014, P001, P002	Fuel burning equipment exemption	18-06(A)		Yes	No	No	No	No	No	No	No	No	No	No	ND, OR, M, R, Rp, ET – Exempt during any day when burning natural gas
B010, B014	1.6 lb/MMBtu SO <sub>2</sub> when burning fuel oil	18-06(D)		No	Yes	Yes	Yes	No	Yes	No	Yes	No	No	No	ST – Less stringent than 31-05(A)(3) ET – Compliance determined by record keeping of fuel analyses and sulfur content.
B010, B011, B012	1.6 lb/MMBtu SO <sub>2</sub> when burning coal	18-15(N)		No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	ET – Compliance determined by record keeping of fuel analyses and sulfur content.
B010, B011, B012, B014	NESHAP for Industrial, Commercial, and Institutional		40 CFR 63, DDDDD	No	Yes	Yes	No	No	Yes	No	Yes	No	Yes	No	OR, ET – Compliance determined by record keeping of fuel analyses.



	Boilers and Process Heaters															
B010, B011, B012	Compliance Assurance Monitoring (CAM)		40 CFR 64	No	Yes	Yes	No	No	Yes	No	Yes	No	Yes	No		OR – This facility has submitted an acceptable CAM plan that includes the use of a COMS.
B014	When burning natural gas: 0.02 lb/MMBtu PE and PM <sub>10</sub> ; 0.0006 lb/MMBtu SO <sub>2</sub> ; 0.10 lb/MMBtu NO <sub>x</sub> ; 0.04 lb/MMBtu CO; 0.0014 lb/MMBtu VOC		31-05(A)(3)	No	No	No	No	No	No	No	No	No	No	No		OR, M, R, Rp, ET - The lb/MMBTU emission limitations are based on the EU's potential to emit.
B014	When burning No. 2 fuel oil: 0.02 lb/MMBtu PE and PM <sub>10</sub> ; 0.30 lb/MMBtu SO <sub>2</sub> ; 0.15 lb/MMBtu NO <sub>x</sub> ; 0.035 lb/MMBtu CO; 0.001 lb/MMBtu VOC		31-05(A)(3)	No	No	No	No	No	No	No	No	No	No	No		OR, M, R, Rp, ET - The lb/MMBTU emission limitations are based on the EU's potential to emit.
B014	When burning any combination of natural gas and No. 2 fuel oil: 1.9 TPY PE and PM <sub>10</sub> ; 39.937 TPY SO <sub>2</sub> ; 37.5		31-05(D)	No	Yes	Yes	No	No	Yes	No	Yes	No	No	No		OR – Fuel usage limitations ET – Compliance with the TPY limitations will be demonstrated by compliance with the fuel usage limitations.



	TPY NO <sub>x</sub> ; 15.0 TPY CO; 1.525 TPY VOC															
B014	20% opacity as a six- minute average	17-07(A)(1)		No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	ET – USEPA approved alternative opacity monitoring program.	
B014	20% opacity as a six- minute average, except for one period not more than 27%		40 CFR 60, Db	No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	ET – USEPA approved alternative opacity monitoring program.	
B011, B012, B014	0.02 lb/MMBtu PE	17-10(B)(1)		No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	ET – Compliance determined by record keeping of fuel analyses.	
B014	0.03 lb/MMBtu SO <sub>2</sub> and 0.3% by weight		31-05(A)(3)	No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	ET – Compliance determined by record keeping of fuel analyses and sulfur content.	
K001	3.0 lbs/hr OC		31-05(A)(3)	No	No	No	No	No	No	No	No	No	No	No	OR, M, R, Rp, ET - The lb/hr emission limitation is based on the EU's potential to emit.	
K001	24 lbs/day OC		31-05(A)(3)	No	Yes	Yes	No	No	Yes	No	No	No	No	No	OR – 7.91 lb/gal OC for coating and cleanup ET – Compliance determined by record keeping of coatings and cleanup OC content and daily usage.	
K001	3.1 TPY OC		31-05(A)(3)	No	Yes	Yes	No	No	Yes	No	No	No	No	No	OR – 7.91 lb/gal OC for coating and cleanup ET – Compliance determined by record keeping of coatings and cleanup OC content and annual usage.	
K001	0.1 lb/hr PE/PM <sub>10</sub>		31-05(A)(3)	No	No	No	No	No	No	No	No	No	No	No	OR, M, R, Rp, ET - The lb/hr emission limitation is based on the EU's potential to emit.	
K001	0.44 TPY lb/hr PE/PM <sub>10</sub>		31-05(A)(3)	No	No	No	No	No	No	No	No	No	No	No	OR, M, R, Rp, ET - The TPY emission limitation is based on the EU's potential to emit.	



K001	10% opacity as a six-minute average		31-05(A)(3)	No	No	No	No	No	No	No	No	No	No	No	Compliance using U.S. EPA method 9 readings
K001, P001, P002	20% opacity as a six-minute average	17-07(A)(1)		No	No	No	Yes	No	No	No	No	No	No	No	OR, M, ST, R, Rp, ET – Less stringent than 31-05(A)(3)
K001	Restrictions from industrial processes	17-11(C)(3)		No	No	No	Yes	No	No	No	No	No	No	No	OR, M, ST, R, Rp, ET – Less stringent than 31-05(A)(3)
K001	3 gallons/day	21-09(U)(2)(e)(ii)		No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	OR – Maximum 3 gals/day when coating miscellaneous metal parts. ET – Compliance determined by record keeping of daily coating usage.
K001	NESHAP for Surface Coating of Miscellaneous Metal Parts and Products		40 CFR 63, MMMM	Yes	No	No	No	No	No	No	No	No	No	No	ND, OR, M, R, Rp, ET – Exempt per 40 CFR 63.3881(c)(2).
P001, P002	0.88 lb/hr PE and PM <sub>10</sub> ; 0.03 lb/hr SO <sub>2</sub> ; 8.9 lbs/hr NO <sub>x</sub> ; 3.2 lbs/hr VOC		31-05(A)(3)	No	No	No	No	No	No	No	No	No	No	No	OR, M, R, Rp, ET - The lb/hr emission limitation is based on the EU's potential to emit.
P001, P002	1.5 TPY PE and PM <sub>10</sub> ; 0.05 TPY SO <sub>2</sub> ; 15.5 TPY NO <sub>x</sub> ; 5.75 TPY CO; 5.55 TPY VOC		31-05(D)	No	Yes	Yes	No	No	Yes	No	Yes	No	No	No	OR – Emissions unit restricted to 3,500 operating hours per year.
P001, P002	10% opacity as a six-minute		31-05(A)(3)	No	No	No	No	No	No	No	No	No	No	No	Compliance using U.S. EPA method 9 readings.



2	average														
P001, P002	Restrictions from industrial processes	17-11(B)(5)(b)		No	No	No	Yes	No	No	No	No	No	No	No	OR, M, ST, R, Rp, ET – Less stringent than 31-05(A)(3).
P001, P002	3.3 lbs/hr CO & mass emission reduction of at least 90%		40 CFR 63, ZZZZ	No	Yes	Yes	No	No	Yes	No	Yes	No	Yes	No	OR – Emissions vented to a catalytic oxidation system.





**DRAFT**

**Division of Air Pollution Control  
Title V Permit  
for  
Miami University**

Facility ID:	1409090081
Permit Number:	P0097324
Permit Type:	Renewal
Issued:	7/6/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





Division of Air Pollution Control
Title V Permit
for
Miami University

Table of Contents

Authorization ..... 1
A. Standard Terms and Conditions ..... 2
1. Federally Enforceable Standard Terms and Conditions ..... 3
2. Monitoring and Related Record Keeping and Reporting Requirements..... 3
3. Scheduled Maintenance..... 6
4. Risk Management Plans ..... 6
5. Title IV Provisions ..... 7
6. Severability Clause ..... 7
7. General Requirements ..... 7
8. Fees..... 8
9. Marketable Permit Programs..... 8
10. Reasonably Anticipated Operating Scenarios ..... 8
11. Reopening for Cause ..... 9
12. Federal and State Enforceability ..... 9
13. Compliance Requirements ..... 9
14. Permit Shield ..... 11
15. Operational Flexibility..... 11
16. Emergencies..... 11
17. Off-Permit Changes ..... 11
18. Compliance Method Requirements ..... 12
19. Insignificant Activities or Emissions Levels..... 12
20. Permit to Install Requirement ..... 12
21. Air Pollution Nuisance ..... 13
22. Permanent Shutdown of an Emissions Unit ..... 13
23. Title VI Provisions ..... 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only ..... 14
25. Inspections and Information Requests ..... 14
26. Scheduled Maintenance/Malfunction Reporting ..... 14
27. Permit Transfers ..... 15
28. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations ..... 15



B. Facility-Wide Terms and Conditions.....	16
C. Emissions Unit Terms and Conditions .....	20
1. B010, Boiler #1 .....	21
2. B014, Boiler #4 .....	39
3. K001, Paint Booth .....	57
4. Emissions Unit Group -4-stroke Reciprocating Engines: P001,P002, .....	63
5. Emissions Unit Group -Coal/Natural Gas-Fired Boilers: Boilers #2 and #3.....	74

## Authorization

Facility ID: 1409090081  
Facility Description: University Campus and Power Plant  
Application Number(s): A0028965, A0028966, A0028967, A0036634  
Permit Number: P0097324  
Permit Description: Renewal Title V for Miami University, which consists a number of coal, fuel oil, natural gas boilers and natural gas and diesel engines that provide heat, electricity, and steam to the university along with a spray booth, laboratory hoods, an incinerator, coal storage piles, fuel oil storage tanks that are located through out the university's property.  
Permit Type: Renewal  
Issue Date: 7/6/2012  
Effective Date: To be entered upon final issuance  
Expiration Date: To be entered upon final issuance  
Superseded Permit Number: P0097323

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

Miami University  
Cole Service Building  
Oxford Campus  
Oxford, OH 45056

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

Southwest Ohio Air Quality Agency  
250 William Howard Taft Rd.  
Cincinnati, OH 45219  
(513)946-7777

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Southwest Ohio Air Quality Agency. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally  
Director



## **A. Standard Terms and Conditions**

## 1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

*(Authority for term: ORC 3704.036(A))*

## 2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.

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

- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

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

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

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

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

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

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

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

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

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive

**Effective Date:** To be entered upon final issuance

measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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

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

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

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

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

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

insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

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

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

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

- (4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Southwest Ohio Air Quality Agency.

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

### **3. Scheduled Maintenance**

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

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

### **4. Risk Management Plans**

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:



- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

## **5. Title IV Provisions**

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

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

## **6. Severability Clause**

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

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

## **7. General Requirements**

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the



Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

- (1) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when: the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable; or a combination of (1) and (2) above.

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

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

## **8. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

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

## **9. Marketable Permit Programs**

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

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

## **10. Reasonably Anticipated Operating Scenarios**

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

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

## 11. Reopening for Cause

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

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

## 12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

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

## 13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible 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 paragraph (E) of OAC rule 3745-77-03. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (3) 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 appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
  - (2) Compliance certifications shall include the following:
    - a. An identification of each term or condition of this permit that is the basis of the certification.
    - b. The permittee's current compliance status.
    - c. Whether compliance was continuous or intermittent.
    - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

**14. Permit Shield**

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

**15. Operational Flexibility**

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

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

**16. Emergencies**

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

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

**17. Off-Permit Changes**

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

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that



qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

#### **18. Compliance Method Requirements**

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

*(This term is provided for informational purposes only.)*

#### **19. Insignificant Activities or Emissions Levels**

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

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

#### **20. Permit to Install Requirement**

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

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

**21. Air Pollution Nuisance**

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

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

**22. Permanent Shutdown of an Emissions Unit**

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

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

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

**23. Title VI Provisions**

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

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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

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

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

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.

**25. Inspections and Information Requests**

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

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

**26. 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 of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air

agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**27. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

## **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 following insignificant emissions units are located at this facility:
  - G001 Gasoline Dispensing Facility [PBR07268]
  - N024 Econo-Therm 3661 Incinerator [PBR04375]
  - P003 100 kW Kohler natural gas-fired emergency generator [PBR04354]
  - P005 Emergency Generator 300 kW Kohler distillate oil-fired [PBR04356]
  - P006 75 kW Kohler natural gas-fired emergency generator [PBR04357]
  - P007 300 kW Generac distillate oil and natural gas-fired emergency generator [PBR04358]
  - P009 39 kW Kohler natural gas-fired emergency generator [PBR04360]
  - P010 Emergency Generator 50 kW Kohler natural gas-fired [PBR04361]
  - P011 150 kW Kohler distillate oil-fired emergency generator [PBR04362]
  - P012 125 kW Kohler distillate oil-fired emergency generator [PBR04363]
  - P013 Emergency Generator Kohler 57 kW natural gas-fired [PBR04364]
  - P014 100 kW Kohler natural gas-fired emergency generator [PBR04365]
  - P015 60 kW Kohler natural gas-fired emergency generator [PBR04366]
  - P016 450 kW Kohler generator Emergency Generator 01 [PBR04367]
  - P017 285 kW Mecan generator Emergency Generator 02 [PBR04368]
  - P018 50 kW Kohler distillate oil-fired emergency generator [PBR04369]
  - P019 100 kW Kohler natural gas-fired emergency generator [PBR04370]
  - P020 500 kW Kohler diesel-fired emergency generator [PBR04371]
  - P021 350 kW Kohler distillate oil-fired emergency generator [PBR04372]
  - P022 300 kW Generac distillate oil and natural gas-fired emergency generator [PBR04373]
  - P023 Kohler emergency generator [PBR04374]
  - P024 Kohler emergency generator [PBR04375]
  - P025 Kohler emergency generator [PBR04376]



- P026 Generac emergency generator [PBR04377]
- P027 55 kW Kohler emergency generator [PBR09268]
- P028 1000 KW Detroit diesel emergency generator [PBR06515]
- P029 1000 KW Detroit Diesel Emergency Generator [PBR06516]
- P030 Kohler diesel Emergency Generator [PBR06579]
- P031 CAB emergency generator [PBR07186]
- P032 Kohler 300 kw diesel emergency generator [PBR07595]
- P033 – P044 [per OAC 3745-77-01(V)(4)]
- P074 40 kW Kohler oil-fired emergency generator [PBR09338]

Each insignificant emissions unit at this facility must comply with all applicable state and federal regulations, as well as any emission limitations and/or control requirements contained within a permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

3. **40 CFR Part 63, Subpart DDDDD (Boiler MACT) Requirements**

The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart DDDDD, in accordance with 40 CFR Parts 63.7480 through 63.7575 (including the Table(s) and Appendix(ices) referenced in Subpart DDDDD).

The following emissions units in this permit are subject to the aforementioned requirements: B010, B011, B012 and B014.

(Authority for term: 40 CFR Part 63)

4. **40 CFR Part 63, Subpart A, General Provisions**

The permittee is subject to the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions), as set forth in Table 10 of Subpart DDDDD.

The following emissions units in this permit are subject to the aforementioned requirements: B010, B011, B012 and B014.

(Authority for term: 40 CFR Part 63)

5. **40 CFR Part 64 Compliance Assurance Monitoring (CAM) Requirements**

The Ohio EPA has approved the Compliance Assurance Monitoring (CAM) plan submitted by the permittee, pursuant to 40 CFR Part 64, for emissions units B010, B011, and B012. The permittee shall



comply with the provisions of the plan (as specified in Part C - Terms and Conditions for Emissions Units) during any operation of the aforementioned emissions units.

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

(Authority for term: 40 CFR Part 64)

## **C. Emissions Unit Terms and Conditions**





c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
d.	OAC rule 3745-17-10(B)(1)	<p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3) when burning only natural gas or No. 2 fuel oil.</p> <p>Should the particulate emission limitation established in 40 CFR Part 63, Subpart DDDDD be more stringent than the particulate emission limitation established under OAC rule 3745-17-10(B)(1), the permittee shall comply with the more stringent emission limitation established under 40 CFR Part 63, Subpart DDDDD after the compliance date in 40 CFR Part 63, Subpart DDDDD.</p>
e.	OAC rule 3745-17-10(C)(1)	<p>Particulate emissions (PE) shall not exceed 0.146 lb/MMBtu of actual heat input when burning coal.</p> <p>Should the particulate emission limitation established in 40 CFR Part 63, Subpart DDDDD be more stringent than the particulate emission limitation established under OAC rule 3745-17-10(C)(1), the permittee shall comply with the more stringent emission limitation established under 40 CFR Part 63, Subpart DDDDD after the compliance date in 40 CFR Part 63, Subpart DDDDD.</p>
f.	OAC rule 3745-18-06(A)	Fuel burning equipment is exempt from paragraphs (D), (F) and (G) of OAC rule 3745-18-06, and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned.
g.	OAC rule 3745-18-06(D)	The SO <sub>2</sub> emission limitation specified by this rule, 1.6 pound per million Btu, when burning fuel oil, is less stringent than the SO <sub>2</sub> emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
h.	OAC rule 3745-18-15(N)	<p>SO<sub>2</sub> emissions shall not exceed 1.6 pound per million Btu when burning coal.</p> <p>See c)(5).</p>

i.	40 CFR Part 63, Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This emissions unit is an existing spreader stoker coal/solid fossil fuel unit.	Applicable Emission Limits in Tables 1 and 2; Work Practice Standards in Table 3 and Operating Limits in Table 4 to Subpart DDDDD of 40 CFR Part 63 (subject to change based on the issuance of the Final Action on Reconsideration of 40 CFR Part 63, Subpart DDDDD by U.S. EPA).  See b)(2)f.
j.	40 CFR Part 64  Compliance Assurance Monitoring	See b)(2)d., b)(2)e., d)(1)-d)(3), and e)(1).  Pursuant to 40 CFR 64.2(b), CAM will not apply to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date in that rule.

(2) Additional Terms and Conditions

- a. The following emission limitations shall not be exceeded when burning natural gas:

Particulate emissions (PE) and Particulate Matter 10 microns or less in diameter (PM<sub>10</sub>) shall not exceed 0.02 lb/MMBtu of actual heat input\*.

Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input\*.

Nitrogen Oxide (NO<sub>x</sub>) emissions shall not exceed 0.10 lb/MMBtu of actual heat input\*.

Carbon Monoxide (CO) emissions shall not exceed 0.035 lb/MMBtu of actual heat input\*.

Volatile Organic Compound (VOC) emissions shall not exceed 0.0028 lb/MMBtu of actual heat input\*.

\*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.

- b. The following emission limitations shall not be exceeded when burning No. 2 fuel oil:

PE/PM<sub>10</sub> shall not exceed 0.02 lb/MMBtu of actual heat input\*.

SO<sub>2</sub> emissions shall not exceed 0.30 lb/MMBtu of actual heat input.

NO<sub>x</sub> emissions shall not exceed 0.15 lb/MMBtu of actual heat input\*.

CO emissions shall not exceed 0.036 lb/MMBtu of actual heat input\*.

VOC emissions shall not exceed 0.001 lb/MMBtu of actual heat input\*.

\*The emission limitations outlined above for PE/PM<sub>10</sub>, NO<sub>x</sub>, CO, and VOC are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.

- c. The maximum total annual emissions from this emissions unit, when burning any combination of natural gas, No. 2 fuel oil, and coal shall not exceed the following emission limitations based on a rolling, 12-month summation:

PE/PM<sub>10</sub> shall not exceed 8.47 tons per year.

SO<sub>2</sub> emissions shall not exceed 64.45 tons per year.

NO<sub>x</sub> emissions shall not exceed 16.52 tons per year.

CO emissions shall not exceed 13.22 tons per year.

VOC emissions shall not exceed 0.15 ton per year.

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

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 64)

- e. The continuous opacity monitoring system consists of all the equipment used to acquire data and record opacity.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.2, 40 CFR Part 60, Appendix B, and 40 CFR Part 64)

- f. The requirements of 40 CFR Part 63, Subpart DDDDD are currently effective due to the January 9, 2012 decision by the United States District Court for the District of Columbia to vacate the administrative stay that U.S. EPA put in place during the reconsideration of the March, 2011 final rules. On February 7, 2012, U.S.

EPA issued a "No Action Assurance" letter to facilities and indicated that U.S. EPA will exercise its enforcement discretion to not pursue enforcement action of violations of the Initial Notification deadlines established in the rule. This letter further notes that U.S. EPA has proposed revisions to the compliance dates for all units (the date by which a unit must be in compliance with the substantive requirements in the Boiler MACT rule) and to the subcategories for some units. U.S. EPA plans to issue a Final Action on Reconsideration of 40 CFR Part 63, Subpart DDDDD in the spring of 2012.

c) Operational Restrictions

- (1) The maximum annual natural gas usage rate for this emissions unit shall not exceed 330 MMcf per year, based on a rolling, 12-month summation.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(D))

- (2) The maximum annual No. 2 fuel oil usage rate for this emissions unit shall not exceed 1,573,000 gallons per year, based on a rolling, 12-month summation.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(D))

- (3) The quality of the No. 2 fuel oil burned in this emissions unit shall have a combination of sulfur content and heat content sufficient to meet the sulfur dioxide emission limitation of 0.30 lb of SO<sub>2</sub>/MMBtu of actual heat input, and shall not exceed a maximum sulfur content of 0.3 percent by weight.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall operate and maintain low-NO<sub>x</sub> burners, at all times when operating this emissions unit, for the combustion of natural gas and No. 2 fuel oil, that comply with the NO<sub>x</sub> heat input emission limitations listed in b)(2)a. and b)(2)b.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (5) The coal received for burning in this emissions unit shall have a sulfur content that, when calculated in terms of pounds of sulfur dioxide per million Btu of heat content, complies with the allowable sulfur dioxide emission limitation contained in this permit.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(A)(3), and OAC rule 3745-18-04(D))

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain on site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office verifying that the continuous opacity monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 64)

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

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including the following:

- a. six-minute opacity averages; these six-minute averages shall be calculated from 36 or more data points equally spaced over each 6-minute period;
- b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;
- d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;
- e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; as well as; and
- f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 64)

- (3) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for visible particulate emissions is the opacity of the visible emissions from the baghouse exhaust stack as measured and recorded by the certified continuous opacity monitoring (COM) system. The visible particulate emissions indicator range is each three-hour rolling average with an opacity value greater than 20%. The three-hour rolling average opacity shall be based on the six-minute block averages recorded in d)(2)a. When the opacity value over the averaging period of the indicator range is greater than 20%, corrective action (including, but not limited to, an evaluation of the emissions unit and baghouse will be required.

Upon detecting an excursion of the visible particulate emission indicator range listed above, the owner or operator shall restore operation of the emissions unit (including the

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

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.h.

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

- (4) After the compliance date specified in 40 CFR Part 63, Subpart DDDDD, the PM monitoring requirements specified in 40 CFR section 63.7525 will replace the monitoring requirements of 40 CFR Part 64 specified in d)(1) - d)(3).

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

- (5) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the fuel oil type (number 2, 4, or 6), 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.

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

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-18-04(E)(3), and 3745-18-04(I))

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

**Effective Date:** To be entered upon final issuance

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

(OAC rules 3745-77-07(C)(1), 3745-18-04(D)(9)(c) and rule 3745-77-07(C)(1))

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

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-04(D))

- (3) The permittee shall collect and record the following information each month for this emissions unit:

- a. the total amount of coal used, in tons per month;
- b. the updated rolling, 12-month summation of coal usage, in tons (the total amount of tons for the current month plus the total amount of tons for the previous eleven calendar months);
- c. the total amount of natural gas used, in MMcf per month;
- d. the updated rolling, 12-month summation of natural gas usage, in MMcf (the total amount of MMcf for the current month plus the total amount of MMcf for the previous eleven calendar months);
- e. the total amount of No. 2 fuel oil used, in gallons per month;
- f. the updated rolling, 12-month summation of fuel oil usage, in gallons (the total amount of gallons for the current month plus the total amount of gallons for the previous eleven calendar months);
- g. the total emissions, in tons, for PE/PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO for each month\*; and
- h. the updated rolling, 12-month summation emissions total, in tons, for PE/PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

\*The monthly TPY emissions shall be calculated based on the fuel usage information contained in d)(8)a. - d)(8)f. and the applicable emission factors and methodologies specified in f)(1). The monthly TPY emission totals shall be based on the summation for each type of fuel burned during the calendar month.

Effective Date: To be entered upon final issuance

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(D), and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall operate and maintain equipment to continuously monitor and record O<sub>2</sub> emitted from this emissions unit in percent O<sub>2</sub> for the control of excess air.

The permittee shall maintain records of data obtained by the continuous O<sub>2</sub> monitoring system. Calibrations shall be according to manufacturer's recommendations. The permittee shall record calibration results of zero/span calibration checks, the magnitude of manual calibration adjustments, and the date of the calibration.

A logbook dedicated to the continuous O<sub>2</sub> monitoring system must be kept onsite and available for inspection during regular office hours.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-02821: d)(1)-d)(9). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:
- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance.
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous opacity monitor;
    - iii. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to

**Effective Date:** To be entered upon final issuance

- the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
- iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
  - v. the total operating time (hours) of the emissions unit;
  - vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
  - vii. the date, time, and duration of any/each malfunction\*\* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
  - viii. the date, time, and duration of any downtime\*\* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
  - ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

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

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

\*\* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.7, 40 CFR Part 60, Appendix B, and 40 CFR Part 64).

- (2) After the compliance date specified in 40 CFR Part 63, Subpart DDDDD, the reporting requirements specified in 40 CFR section 63.7550 will replace the reporting requirements of 40 CFR Part 64 specified in e)(1).

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

- (3) The permittee shall submit quarterly reports on the quality and quantity of coal received for burning in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
  - a. the total quantity of coal received (tons);
  - b. the average ash content (percent) of the coal received;
  - c. the average sulfur content (percent) of the coal received;

- d. the average heat content (Btu/pound) of the coal received; and
- e. the calculated, average sulfur dioxide emission rate (pounds sulfur dioxide/mmBtu actual heat input) for the coal received.

Compliance with the sulfur dioxide emission limit shall be determined each month by calculating the average monthly sulfur dioxide emission rate using the results of the analyses of the monthly composite sample for sulfur content and heat content.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the data obtained during the previous calendar quarters.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-04(D))

- (4) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. an identification of all exceedances of the rolling, 12-month natural gas usage limitation;
  - b. an identification of all exceedances of the rolling, 12-month No. 2 fuel oil usage limitation; and
  - c. an identification of all exceedances of the rolling, 12-month emission limitations for PE/PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO.

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

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

- (5) The permittee shall notify the director (the appropriate District Office or local air agency) in writing of any record which shows a deviation from the allowable sulfur dioxide emission limitation contained in this permit, based upon the sulfur dioxide emission rates for shipment of oil, calculated in accordance with the formula specified in OAC rule 3745-18-04(F). The notification shall include a copy of such record and shall be sent to the director (the appropriate District Office or local air agency) within 45 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (6) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-02821: e)(1)-e)(5). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

## f) Testing Requirements

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

## a. Emission Limitation:

Visible particulate emissions (PE) shall not exceed twenty percent opacity, as a six-minute average, except as specified by rule.

## Applicable Compliance Method:

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) 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.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13 and 40 CFR Part 60, Appendix B).

## b. Emission Limitations:

0.020 lb of PE/PM10/MMBtu of actual heat input when burning natural gas;

0.020 lb of PE/PM10/MMBtu of actual heat input when burning No. 2 fuel oil; and

0.146 lb of PE/MMBtu of actual heat input when burning coal.

## Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs of filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

## Applicable Compliance Method when burning No.2 fuel oil-

When burning No.2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 2.0 lbs of filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

## Applicable Compliance Method when burning coal-

Compliance may be demonstrated by PE stack testing required in f)(2).

If required for natural gas or No.2 fuel oil combustion, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 1-5 of 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-17-10(C)(1) and OAC rule 3745-31-05(A)(3))

c. Emission Limitations:

0.1 lb of NO<sub>x</sub>/MMBtu of actual heat input when burning natural gas; and

0.15 lb of NO<sub>x</sub>/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 100 lbs of NO<sub>x</sub>/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when No.2 fuel oil-

When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 20 lbs of NO<sub>x</sub>/1000 gallons of fuel oil, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitations in accordance with Method 7, 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitations:

0.0006 lb of SO<sub>2</sub>/MMBtu of actual heat input when burning natural gas;

0.3 lb of SO<sub>2</sub>/MMBtu of actual heat input when burning No. 2 fuel oil; and

1.6 lbs of SO<sub>2</sub>/MMBtu of actual heat input when burning coal.

Applicable Compliance Method when burning No. 2 fuel oil-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the calculated sulfur dioxide emission rate for each shipment of oil received during each calendar month meets the sulfur dioxide emission limitation.

Applicable Compliance Method when burning natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb of SO<sub>2</sub>/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning coal-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the calculated sulfur dioxide emission rate for each monthly composite sample of coal meets the sulfur dioxide emission limitation.

Sulfur dioxide emissions from solid fuel samples shall be calculated as follows:

$$ER = (1 \times 10^6) / H \times S \times 1.9$$

where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;

H = the heat content of the solid fuel in Btu per pound; and

S = the decimal fraction of sulfur in the solid fuel.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 6, Method 6A, Method 6B, or Method 6c, whichever is appropriate, of 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-18-15(N), and OAC rule 3745-18-04(F)(1))

e. Emission Limitations:

0.035 lb of CO/MMBtu of actual heat input when burning natural gas; and

0.036 lb of CO/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 84 lbs of CO/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No. 2 fuel oil-

When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 5 lbs of CO/1000 gallons of fuel oil.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation in accordance with Method 10, 40 CFR, Part 60, Appendix A.

(Authority of term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Emission Limitations:

0.0028 lb of VOC/MMBtu of actual heat input when burning natural gas; and

0.001 lb of VOC/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 5.5 lbs of VOC/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No. 2 fuel oil-

When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-3 (revised 5/10) emission factor of 0.2 lb of VOC/1000 gallons of fuel oil.

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitations in accordance with Method 25, 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

g. Emission Limitations:

The total combined emissions from the combustion of natural gas, No. 2 fuel oil, and coal shall not exceed the following, based upon a rolling, 12-month summation:

16.52 TPY of NO<sub>x</sub>;

64.45 TPY of SO<sub>2</sub>;

8.47 TPY of PE;

13.22 TPY of CO; and

0.15 TPY of OC.

Applicable Compliance Method:

Compliance may be demonstrated by the information collected and recorded in d)(8)(h).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within six-months after final permit issuance. Future stack testing will be determined by the frequency established in Ohio EPA Engineering Guide 16.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE when burning coal.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):  
  
Methods 1-5 of 40 CFR Part 60 Appendix A.  
  
Alternative U.S. EPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.
  - d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
  - f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit

and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B))

- (3) Compliance with the rolling 12-month No. 2 fuel oil usage restriction shall be determined by the record keeping requirements specified in d)(8).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

- (4) Compliance with the rolling 12-month natural gas usage restriction shall be determined by the record keeping requirements specified in d)(8).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

- (5) Compliance with the sulfur content limitation for No. 2 fuel oil specified in shall be determined by the record keeping requirements specified in d)(5).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (6) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install number 14-02821: f)(1)-f)(5). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) A control equipment upgrade project at Miami University was approved under PTI 14-05969, issued on October 23, 2007, to enable the permittee to prepare for future 40 CFR Part 63 Subpart DDDDD emission requirements for boilers. This project included the installation of scrubber and baghouse equipment which resulted in a change to the flue gas exhaust parameters of the coal-fired boilers (emissions units B010, B011, and B012). Based upon modeling performed by the permittee, the change in the exhaust parameters had the potential of increasing the ambient air impact for SO<sub>2</sub> greater than 15 ug/m<sup>3</sup> as a 24-hour average. This increase triggered a state-only requirement for a permit modification pursuant to the definition of modification under OAC rule 3745-31-01(QQQ)(1)(b) and requirements under OAC rule 3745-31-02(A)(1)(a). Per OAC rule 3745-31-05(A)(3)(a)(iii), this type of modification did not trigger best available technology requirements for these emissions units.



The permittee provided an air dispersion modeling assessment for the existing coal-fired boilers with the application for PTI 14-05969 in accordance with the requirements of Ohio EPA's Engineering Guide #69, dated 2003. The modeling submitted by the permittee demonstrated that the increase in SO<sub>2</sub> concentration as a result of the control equipment upgrade project will not cause or contribute to a violation of a National Ambient Air Quality Standard (NAAQS) and/or Prevention of Significant Deterioration (PSD) increment violation.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-02(A))



**2. B014, Boiler #4**

**Operations, Property and/or Equipment Description: Boiler #4.**

132 MMBtu/hour natural gas and No. 2 fuel oil-fired boiler

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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) PTI 14-02821	See b)(2)a., b)(2)b., c)(3), c)(4), and c)(5).  Should the emission limitation established in 40 CFR Part 63, Subpart DDDDD be more stringent than the emission limitation established under OAC rule 3745-31-05(A)(3), the permittee shall comply with the more stringent emission limitation established under 40 CFR Part 63, Subpart DDDDD after the compliance date in 40 CFR Part 63, Subpart DDDDD.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-10(B)(1), OAC rule 3745-18-06(A), OAC rule 3745-18-06(D), OAC rule 3745-31-05(D), and 40 CFR Part 60 Subpart Db.
b.	OAC rule 3745-31-05(D) Synthetic Minor to Avoid Prevention of Significant Deterioration and New Source Review	See b)(2)c., c)(1), and c)(2).
c.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart Db.



d.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) shall not exceed 0.020 pound per MMBtu of actual heat input when burning natural gas or No. 2 fuel oil. Should the particulate emission limitation established in 40 CFR Part 63, Subpart DDDDD be more stringent than the particulate emission limitation established under OAC rule 3745-17-10(B)(1), the permittee shall comply with the more stringent emission limitation established under 40 CFR Part 63, Subpart DDDDD after the compliance date in 40 CFR Part 63, Subpart DDDDD.
e.	OAC rule 3745-18-06(A)	Fuel burning equipment is exempt from paragraphs (D), (F) and (G) of OAC rule 3745-18-06, and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned.
f.	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is the same as or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
g.	40 CFR Part 60 Subpart Db New Source Performance Standard (NSPS)	See b)(2)d., b)(2)e., and g)(1).
h.	40 CFR Part 63, Subpart DDDDD— National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This emissions unit is an existing units designed to burn liquid fuel.	Applicable Emission Limits in Tables 1 and 2; Work Practice Standards in Table 3 and Operating Limits in Table 4 to Subpart DDDDD of 40 CFR Part 63 (subject to change based on the issuance of the Final Action on Reconsideration of 40 CFR Part 63, Subpart DDDDD by U.S. EPA).  See b)(2)i.

(2) Additional Terms and Conditions

- a. The following emission limitations shall not be exceeded when burning natural gas:

Particulate emissions (PE) and Particulate Matter 10 microns or less in diameter (PM<sub>10</sub>) shall not exceed 0.02 lb/MMBtu of actual heat input\*.

Sulfur Dioxide (SO<sub>2</sub>) emissions shall not exceed 0.0006 lb/MMBtu of actual heat input\*.

Nitrogen Oxide (NO<sub>x</sub>) emissions shall not exceed 0.10 lb/MMBtu of actual heat input\*.

Carbon Monoxide (CO) emissions shall not exceed 0.04 lb/MMBtu of actual heat input\*.

Volatile Organic Compound (VOC) emissions shall not exceed 0.0014 lb/MMBtu of actual heat input\*.

\*The emission limitations outlined above are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.

- b. The following emission limitations shall not be exceeded when burning No. 2 fuel oil:

PE/PM<sub>10</sub> shall not exceed 0.02 lb/MMBtu of actual heat input\*.

SO<sub>2</sub> emissions shall not exceed 0.30 lb/MMBtu of actual heat input.

NO<sub>x</sub> emissions shall not exceed 0.15 lb/MMBtu of actual heat input\*.

CO emissions shall not exceed 0.035 lb/MMBtu of actual heat input\*.

VOC emissions shall not exceed 0.001 lb/MMBtu of actual heat input\*.

\*The emission limitations outlined above for PE/PM<sub>10</sub>, NO<sub>x</sub>, CO, and VOC are based on the emissions unit's potential to emit (PTE). Therefore, no records are required to demonstrate compliance with these limitations.

- c. The maximum total annual emissions from this emissions unit, when burning any combination of natural gas and No. 2 fuel oil shall not exceed the following emission limitations based on a rolling, 12-month summation:

PE/PM<sub>10</sub> shall not exceed 1.9 tons per year.

SO<sub>2</sub> emissions shall not exceed 39.937 tons per year.

NO<sub>x</sub> emissions shall not exceed 37.5 tons per year.

CO emissions shall not exceed 15.0 tons per year.

VOC emissions shall not exceed 1.525 tons per year.

- d. Visible particulate emissions from the stack shall not exceed 20 percent (20%) opacity as a six-minute average, except for one six-minute period per hour of not more than 27 percent (27%) opacity. This opacity limitation does not apply during periods of start-up, shutdown or malfunction.

- e. The permittee shall operate this emissions unit such that the annual capacity factor when burning fuel oil is less than or equal to 10, where annual capacity

factor is defined in 40 CFR 60.41(b) as the ratio between the actual heat input for a steam generating unit from the fuels burned in a calendar year to the potential heat input for the steam generating unit had it been operated for 8760 hours during a calendar year at the maximum steady state design heat input capacity.

- f. The permittee shall maintain a written quality assurance/quality control plan for the continuous NO<sub>x</sub> monitoring system, designed to ensure continuous valid and representative readings of NO<sub>x</sub> 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<sub>x</sub> 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.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.13, 40 CFR Part 60, Appendix F, and 40 CFR Part 60, Subpart Db))

- g. The permittee shall maintain a written quality assurance/quality control plan for the continuous O<sub>2</sub> monitoring system, designed to ensure continuous valid and representative readings of O<sub>2</sub> 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 O<sub>2</sub> 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.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.13, 40 CFR Part 60, Appendix F, and 40 CFR Part 60, Subpart Db))

- h. The continuous emission monitoring system(s) 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.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.2 and 40 CFR Part 60, Appendix F))

- i. The requirements of 40 CFR Part 63, Subpart DDDDD are currently effective due to the January 9, 2012 decision by the United States District Court for the District of Columbia to vacate the administrative stay that U.S. EPA put in place during the reconsideration of the March, 2011 final rules. On February 7, 2012, U.S. EPA issued a "No Action Assurance" letter to facilities and indicated that U.S.

EPA will exercise its enforcement discretion to not pursue enforcement action of violations of the Initial Notification deadlines established in the rule. This letter further notes that U.S. EPA has proposed revisions to the compliance dates for all units (the date by which a unit must be in compliance with the substantive requirements in the Boiler MACT rule) and to the subcategories for some units. U.S. EPA plans to issue a Final Action on Reconsideration of 40 CFR Part 63, Subpart DDDDD in the spring of 2012.

c) Operational Restrictions

- (1) The maximum annual natural gas usage rate for this emissions unit shall not exceed 750 MMcf per year, based on a rolling, 12-month summation.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(D))

- (2) The maximum annual No. 2 fuel oil usage rate for this emissions unit shall not exceed 1,875,000 gallons per year, based on a rolling, 12-month summation.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(D))

- (3) The quality of the No. 2 fuel oil burned in this emissions unit shall meet the following specifications on an "as received" basis:

- a. a combination of sulfur content and heat content sufficient to meet the sulfur dioxide emission limitation of 0.30 lb of SO<sub>2</sub>/MMBtu of actual heat input; and  
b. a maximum sulfur content of 0.3 percent by weight.

Compliance with the above-mentioned specifications shall be determined by using the results provided by the permittee or oil supplier for each shipment of oil.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall operate and maintain low-NO<sub>x</sub> burners, at all times when operating this emissions unit, for the combustion of natural gas and No. 2 fuel oil, that comply with the NO<sub>x</sub> heat input emission limitations listed in b)(2)a. and b)(2)b.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

- (5) The permittee shall burn only natural gas or No. 2 fuel oil in this emissions unit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

d) Monitoring and/or Recordkeeping Requirements

- (1) For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the fuel oil type (number 2, 4, or 6), 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

**Effective Date:** To be entered upon final issuance

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

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

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-18-04(E), and OAC rule 3745-18-04(I))

- (2) The permittee shall collect and record the following information each month for this emissions unit:
- a. the total amount of natural gas used, in MMcf per month;
  - b. the updated rolling, 12-month summation of natural gas usage, in MMcf (the total amount of MMcf for the current month plus the total amount of MMcf for the previous eleven calendar months);
  - c. the total amount of No. 2 fuel oil used, in gallons per month;
  - d. the updated rolling, 12-month summation of fuel oil usage, in gallons (the total amount of gallons for the current month plus the total amount of gallons for the previous eleven calendar months);
  - e. the calculation of the annual capacity factor, pursuant to 40 CFR 60.41b, for No. 2 fuel oil in order to demonstrate infrequent operation of this emissions unit;
  - f. the total emissions, in tons, for PE/PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO for each month;\* and
  - g. the updated rolling, 12-month summation emissions total, in tons, for PE/PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC and CO (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

\*The monthly TPY emissions shall be calculated based on the fuel usage information contained in d)(2)a.-d)(2)d. and the applicable emission factors and methodologies specified in f)(1). The monthly TPY emission totals shall be based on the summation for each type of fuel burned during the calendar month.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

**Effective Date:** To be entered upon final issuance

- (3) The permittee shall operate and maintain equipment to continuously monitor and record NO<sub>x</sub> 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.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), and 40 CFR Part 60 Subpart Db)

- (4) 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 NO<sub>x</sub> 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.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 60 Subpart Db)

- (5) 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 O<sub>2</sub> monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 60 Subpart Db)

- (6) The permittee shall maintain records of all data obtained by the continuous NO<sub>x</sub> monitoring system including, but not limited to:
- a. emissions of NO<sub>x</sub> 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<sub>x</sub> in units of the applicable standard(s) in the appropriate averaging period;
  - c. results of quarterly cylinder gas audits;
  - 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<sub>x</sub> 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<sub>x</sub> monitoring system;

**Effective Date:** To be entered upon final issuance

- h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO<sub>x</sub> 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.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.13. and 40 CFR Part 60, Appendices B & F)

- (7) The permittee shall operate and maintain equipment to continuously monitor and record O<sub>2</sub> emitted from this emissions unit in percent O<sub>2</sub>. The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of all data obtained by the continuous O<sub>2</sub> monitoring system including, but not limited to:

- a. the percent O<sub>2</sub> with each cycle time of the analyzer, with no resolution less than one data point per minute required;
- b. results of quarterly cylinder gas audits;
- c. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- d. results of required relative accuracy test audit(s);
- e. hours of operation of the emissions unit, continuous O<sub>2</sub> monitoring system;
- f. the date, time, and hours of operation of the emissions unit without the continuous O<sub>2</sub> monitoring system;
- g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O<sub>2</sub> monitoring system; as well as,
- h. the reason (if known) and the corrective actions taken (if any) for each such event in (f) and (g).

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.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.13 and 40 CFR 60, Appendices B & F)

- (8) For each day during which the permittee burns a fuel other than natural gas or No. 2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (9) The permittee shall conduct, or have conducted, a 6-minute visible particulate emissions test for each daylight shift that this emissions unit burns No. 2 fuel oil. The visible particulate emissions test shall be conducted at the maximum rate of oil consumption during the shift. In addition, the permittee shall conduct, or have conducted, a 6-minute visible particulate emissions test whenever this emissions unit reaches operating load after a cold startup with No. 2 fuel oil.

The visible particulate emissions tests shall be performed in accordance with the following requirements:

- a. The following test method(s) shall be employed to demonstrate compliance with the visible particulate limitation: Method 9 as outlined in 40 CFR Part 60, Appendix A;
- b. The visible particulate emissions test shall be conducted by a certified visible emissions evaluator who has met the specifications of Method 9 outlined in 40 CFR Part 60, Appendix A, and
- c. If the average opacity for a 6-minute set of observations exceeds 10 percent, the observer shall perform two additional 6-minute sets of visible emission observations.

A comprehensive written report on the results of the visible particulate emissions test shall be signed by the person or persons responsible for the test and retained for a period of five years from the date the record was created. This report shall contain the following information:

- d. A copy of the completed visible emissions evaluation form containing the date and time of the test and results of each observation; and
- e. A copy of the visible emissions evaluator certification.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13(i)(2), and 40 CFR Part 60, Subpart Db)

- (10) This emissions unit shall be operated and maintained in accordance with the manufacturer's recommendations. The permittee shall maintain records verifying that necessary maintenance activities have been performed on this emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13(i)(2), and 40 CFR Part 60, Subpart Db)

- (11) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-02821: d)(1)-d)(10). The

monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the following:
  - a. an identification of all exceedances of the rolling, 12-month natural gas usage limitation;
  - b. an identification of all exceedances of the rolling, 12-month No. 2 fuel oil usage limitation;
  - c. an identification of all exceedances of the rolling, 12-month emission limitations for PE, /PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO; and
  - d. an identification of the exceedance of the annual 10% fuel oil capacity factor.

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60.13(i)(2), 40 CFR Part 60, Subpart Db, OAC rule 3745-31-05(A)(3), and OAC rule 3745-31-05(D))

- (2) The permittee shall submit quarterly reports to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances when the 6-minute average opacity exceeds the applicable limits specified in the b)(2)d. of this permit when burning No. 2 fuel oil during the previous calendar quarter. In addition, the excess emission reports shall include the total time of the visible emission observations during the calendar quarter and the total amount of fuel oil burned during the calendar quarter.

If there are no excess emissions during the previous calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13(i)(2), and 40 CFR Part 60, Subpart Db)

- (3) The permittee shall notify the director (the appropriate District Office or local air agency) in writing of any record which shows a deviation from the allowable sulfur dioxide emission limitation contained in this permit, based upon the sulfur dioxide emission rates

**Effective Date:** To be entered upon final issuance

for shipment of oil, calculated in accordance with the formula specified in OAC rule 3745-18-04(F). The notification shall include a copy of such record and shall be sent to the director (the appropriate District Office or local air agency) within 45 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (4) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or No. 2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (5) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NO<sub>x</sub> 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<sub>x</sub> emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
  - i. the facility name and address;
  - ii. the manufacturer and model number of the continuous NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> monitoring system while the emissions unit was in operation;

- viii. results and dates of quarterly cylinder gas audits;
- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO<sub>x</sub> 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<sub>x</sub> monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime\*\* of the continuous NO<sub>x</sub> 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

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.7, and 40 CFR Part 60, Subpart Db)

- (6) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous O<sub>2</sub> monitoring system:
- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of continuous O<sub>2</sub> monitoring system downtime and malfunction while the emissions unit was on line.
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous O<sub>2</sub> 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 total operating time (hours) of the emissions unit;
- v. the total operating time of the continuous O<sub>2</sub> monitoring system while the emissions unit was in operation;
- vi. results and dates of quarterly cylinder gas audits;
- vii. unless previously submitted, results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));
- viii. unless previously submitted, the results of any relative accuracy test audit showing the continuous O<sub>2</sub> monitor out-of-control and the compliant results following any corrective actions;
- ix. the date, time, and duration of any/each malfunction\* of the continuous O<sub>2</sub> monitoring system while the emissions unit was in operation;
- x. the date, time, and duration of any downtime\* of the continuous O<sub>2</sub> monitoring system while the emissions unit was in operation; and
- xi. the reason (if known) and the corrective actions taken (if any) for each event in (b)(ix) and (x).

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

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.7, and 40 CFR Part 60, Subpart Db)

- (7) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-02821: e)(1)-e)(6). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 20 percent (20%) opacity as a six-minute average, except for one six-minute period per hour of not more than 27 percent (27%) opacity.

Applicable Compliance Method:

When combusting fuel oil, compliance with this emission limitation shall be determined by the record keeping requirement in d)(9).

If required, when burning natural gas, compliance with this emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60.13(i)(2), and 40 CFR Part 60 Subpart Db)

b. Emission Limitations:

0.020 lb of PE/PM10/MMBtu of actual heat input when burning natural gas; and

0.020 lb of PE/PM10/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs of filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No.2 fuel oil-

When burning No.2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 2.0 lbs of filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 1-5 of 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) and OAC rule 3745-17-10(B)(1))

c. Emission Limitations:

0.1 lb of NO<sub>x</sub>/MMBtu of actual heat input when burning natural gas; and

0.15 lb of NO<sub>x</sub>/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method

Ongoing compliance with the NO<sub>x</sub> emission 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.

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitations in accordance with Method 7, 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.13, and 40 CFR Part 60, Appendices B & F)

d. Emission Limitations:

0.0006 lb of SO<sub>2</sub>/MMBtu of actual heat input when burning natural gas; and

0.3 lb of SO<sub>2</sub>/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning No. 2 fuel oil-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the calculated sulfur dioxide emission rate for each shipment of oil received during each calendar month meets the sulfur dioxide emission limitation.

Applicable Compliance Method when burning natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb of SO<sub>2</sub>/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 6, Method 6A, Method 6B, or Method 6c, whichever is appropriate, of 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

## e. Emission Limitations:

0.04 lb of CO/MMBtu of actual heat input when burning natural gas; and

0.035 lb of CO/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 84 lbs of CO/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No. 2 fuel oil-

When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 5/10) emission factor of 5 lbs of CO/1000 gallons of fuel oil.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitation in accordance with Method 10, 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

## f. Emission Limitations-

0.0014 lb of VOC/MMBtu of actual heat input when burning natural gas; and

0.001 lb of VOC/MMBtu of actual heat input when burning No. 2 fuel oil.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (MM cu.ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (revised 7/98) emission factor of 5.5 lbs OC/MM cu. ft of natural gas, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning No. 2 fuel oil-

When burning No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-3 (revised 9/98) emission factor of 0.2 lb of OC/1000 gallons of fuel oil.

If required, the permittee shall demonstrate compliance with the lb/MMBtu limitations in accordance with Method 25, 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

## g. Emission Limitations:

The total combined emissions from the combustion of natural gas, No. 2 fuel oil, and coal shall not exceed the following, based upon a rolling, 12-month summation:

37.5 TPY NO<sub>x</sub>;

39.937 TPY SO<sub>2</sub>;

1.9 TPY PE/PM<sub>10</sub>;

15.0 TPY CO; and

1.525 TPY VOC.

Applicable Compliance Method:

Compliance may be demonstrated by the information collected and recorded in d)(2)(g).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

- (2) Compliance with the rolling 12-month No. 2 fuel oil usage restriction shall be determined by the record keeping requirements specified in d)(2).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

- (3) Compliance with the rolling 12-month natural gas usage restriction shall be determined by the record keeping requirements specified in d)(2).

(Authority of term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

- (4) Compliance with the sulfur content limitation for No. 2 fuel oil specified in shall be determined by the record keeping requirements specified in d)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

- (5) Ongoing compliance with the O<sub>2</sub> monitoring requirements 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 demonstration of compliance with the quality assurance/quality control plan, which shall meet all of the testing and recertification requirements of 40 CFR Part 60.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR 60.13 and 40 CFR Part 60, Appendices B & F)

- (6) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install number 14-02821: f)(1) - f)(5). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating

permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) **Miscellaneous Requirements**

- (1) The permittee submitted a plan to US EPA Region 5 and received approval of an alternative opacity monitoring program for this emissions unit based on infrequent operation of this emissions unit when burning No. 2 fuel oil pursuant to 40 CFR 60.13(i)(2). Compliance with the opacity limitations under the alternative plan is achieved by the limited use of inherently clean fuels. Compliance with the infrequent operation designation of this emissions unit shall be demonstrated by the monitoring and record keeping requirements specified above in d)(2). If this emissions unit exceeds the annual capacity factor limitation for No. 2 fuel oil use specified in b)(2)e. based on the required record keeping in d)(2), the permittee shall comply with continuous opacity monitoring requirements, including the installation and certification of a continuous opacity monitoring system, as specified in 40 CFR 60.48b.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13(i)(2), and 40 CFR Part 60 Subpart Db)



3. K001, Paint Booth

Operations, Property and/or Equipment Description:

Maintenance Shop Paint Spray Booth

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) 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) PTI 14-05611	<p>Organic compound (OC) emissions shall not exceed 3.0 pounds per hour*, 24 pounds per day and 3.1 tons per year.</p> <p>Particulate emissions (PE) and Particulate Matter 10 microns or less in diameter (PM<sub>10</sub>) shall not exceed 0.1 pound per hour* and 0.44 ton per year.</p> <p>Visible particulate emissions (PE) from any stack associated with this emissions unit shall not exceed 10% percent opacity, as a six-minute average.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(2)(e)(ii.)</p> <p>* The hourly emission limitations outlined above are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits</p> <p>See b)(2)a., and c)(2).</p>
b.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-11(C)(3)	Any surface coating process with a permit-to-install issued after January 1, 1990 that identifies particulate emission limitations and or control measures based on best available technology, best available control technology, or the lowest achievable emission rate shall comply with such limitations and measures instead of 3745-17-11(C)(1) and (C)(2).
d.	OAC rule 3745-21-09(U)(2)(e)(ii)	See c)(1).
e.	40 CFR part 63, Subpart MMMM Surface coating of Miscellaneous Metal Parts.	Exempt per 40 CFR Part 63.3881(c)(2)

(2) Additional Terms and Conditions

- a. The maximum OC content of each coating and cleanup material employed in this emissions unit shall not exceed 7.91 pounds of OC per gallon, as applied, for all substrates (wood, metal parts and plastic.)

c) Operational Restrictions

- (1) The maximum daily coating usage for this emissions unit shall not exceed 3 gallons per day when coating miscellaneous metal parts.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-21-09(U)(2)(e)(ii))

- (2) The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 780 gallons per year for all substrates (wood, metal parts and plastic).

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information each day for this emissions unit:

- a. the name and identification number of each coating and cleanup material;
- b. the volume, in gallons, of each coating employed;
- c. the total volume, in gallons, of all of the coatings employed;
- d. the volume, in gallons, of each cleanup material employed;
- e. the OC content of each coating employed, in pounds OC per gallon of coating, as applied;

**Effective Date:** To be entered upon final issuance

- f. the OC content of each cleanup material employed, in pounds OC per gallon of coating, as applied;
- g. the OC emissions from the application of coatings and cleanup materials, in pounds OC per day (the summation of b. multiplied by e. for the coatings and d. multiplied by f. for the cleanup materials employed in K001); and
- h. the total volume, in gallons, of all of the coatings employed on miscellaneous metal parts.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) and OAC rule 3745-21-09(U)(2)(e)(ii))

- (2) The permittee shall maintain both monthly and year-to-date records of the total volume, in gallons, of all coatings and cleanup material employed in this emission.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05611: d)(1)-d)(2). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall notify the Director (appropriate District Office or local air agency) in writing of any daily record showing that the emissions unit employed coatings and/or cleanup materials that exceeded the applicable maximum OC content limits specified in b)(2)a. and any resulting exceedance of the daily OC emissions limit specified in b)(1)a. due to the OC content exceedance. The notification shall include a copy of such record and shall be sent to the appropriate District Office or local air agency within 45 days after the exceedance occurs.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall notify the Director (appropriate District Office or local air agency) in writing of any daily record showing that the emissions unit employed more than the applicable maximum daily coating usage limit of 3 gallons per day. The notification shall include a copy of such record and shall be sent to the appropriate District Office or local air agency within 45 days after the exceedance occurs.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(e))

- (3) The permittee shall submit annual reports which specify the annual coating and cleanup material usage and the total OC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05611: e)(1) - e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
- Organic compound (OC) emissions shall not exceed 3.0 pounds per hour.
- Applicable Compliance Method:
- The hourly emission limitation specified above is based on the emissions unit's potential to emit. Compliance may be demonstrated by multiplying the maximum OC content limitation (7.91 lbs/gal) by the maximum application rate (0.375 gal/hr).
- (Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
- b. Emission Limitations:
- Organic compound (OC) emissions shall not exceed 24 pounds per day and 3.1 tons per year.
- Applicable Compliance Method:
- Compliance with the above emission limitations shall be demonstrated by the record keeping requirements specified in d)(1) and d)(2).
- (Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))
- c. Emission Limitation:
- Particulate emissions (PE) and Particulate Matter 10 microns or less in diameter (PM10) shall not exceed 0.1 pound per hour and 0.44 ton per year.
- Applicable Compliance Method:
- Compliance with the particulate emission limit shall be demonstrated in accordance with the following method:
- To determine the actual worst case emission rate for particulate matter, the following equation shall be used:

$E = \text{maximum coating solids usage rate (in pounds per hour)} \times (1-TE) \times (1-CE)$

where, E = particulate matter emissions rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used. (as 50% per vendor information contained in PTI application 14-05611, received on August 27, 2004.)

CE = control efficiency of the control equipment (as 94% filter media efficiency per manufacturer information contained in PTI application 14-05611, received on August 27, 2004.)

To determine the actual worst case annual emission rate (TPY) for particulate matter, multiply the calculated value for E above by 8760 hours/year and divide by 2000 lbs/ton.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

Visible particulate emissions (PE) from any stack shall not exceed 10% percent opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emissions limitation shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

e. Usage Limitation:

Maximum OC content of 7.91 pounds of OC per gallon for coating and cleanup materials, as applied.

Applicable Compliance Method:

Formulation data or USEPA method 24 (for coatings) shall be used to determine the OC contents of the coatings and cleanup materials.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

f. Usage Limitation:

The maximum daily coating usage for this emissions unit shall not exceed 3 gallons per day when coating miscellaneous metal parts.

**Applicable Compliance Method:**

Compliance with the coating usage limitation employed on miscellaneous metal parts in c)(1) shall be determined by the record keeping requirements as specified in d)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(U)(2)(e)(ii))

**g. Usage Limitation:**

The maximum annual coating and cleanup material usage for this emissions unit shall not exceed 780 gallons per year for all substrates (wood, metal parts and plastic).

**Applicable Compliance Method:**

Compliance with the coating and cleanup material usage limitation in c)(2) shall be determined by the record keeping requirements as specified in d)(1).

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install number 14-05611: f)(1). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

**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 a permittee to apply for and obtain a new or modified PTI 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 PTI.

(Authority for term: ORC 3704.03(F)(3)(c) and F(4))



**4. Emissions Unit Group -4-stroke Reciprocating Engines: P001,P002,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
P001	5732 KW lean burn natural gas fired 4-stroke reciprocating engine
P002	5732 KW lean burn natural gas fired 4-stroke reciprocating engine

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 14-05536	See b)(2)a., b)(2)b., and c)(1).  The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 63 Subpart ZZZZ.
b.	OAC rule 3745-31-05(D) PTI 14-05536 Synthetic Minor to avoid Major Modification New Source Review	See b)(2)c. and c)(2).
c.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(5)(b)	The emission limitation specified by this rule is the same as or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-18-06(A)	Fuel burning equipment is exempt from paragraphs (D), (F) and (G) of OAC rule 3745-18-06, and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned.

**Effective Date:** To be entered upon final issuance

f.	40 CFR Part 63 Subpart ZZZZ— Stationary Reciprocating Internal Combustion Engines (RICE). This emissions unit is a new 4SLB unit fired by natural gas with a horsepower rating greater than 250.	See b)(2)d.- b)(2)g. and c)(3).
----	--	---------------------------------

(2) Additional Terms and Conditions

- a. The following hourly emission limitations shall not be exceeded:
- i. particulate emissions (PE) and particulate matter 10 microns or less in diameter (PM<sub>10</sub>) shall not exceed 0.88 pound per hour;
  - ii. sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.03 pound per hour;
  - iii. nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 8.9 pounds per hour;
  - iv. carbon monoxide (CO) emissions shall not exceed 3.3 pounds per hour; and
  - v. volatile organic compound (VOC) emissions shall not exceed 3.2 pounds per hour.

The hourly emission limitations outlined above for NO<sub>x</sub>, CO, VOC, PE/PM<sub>10</sub>, and SO<sub>2</sub> are based on the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limits.

- b. Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.
- c. The following annual emission limitations shall not be exceeded based on a rolling 12-month summation:
- i. particulate emissions and particulate matter 10 microns or less in diameter shall not exceed 1.55 tons per year;
  - ii. sulfur dioxide emissions shall not exceed 0.05 tons per year;
  - iii. nitrogen oxide emissions shall not exceed 15.5 tons per year;
  - iv. carbon monoxide emissions shall not exceed 5.75 tons per year; and
  - v. volatile organic compound emissions shall not exceed 5.55 tons per year.
- d. The emissions unit shall be equipped with a catalytic oxidation system maintained and operated as follows, except during periods of startup, shutdown, and malfunction:
- i. all emissions are vented to the catalytic oxidation system,

- ii. the mass emissions of CO from the emissions unit are reduced by 93 percent or more,
- iii. the catalyst inlet temperature is greater than or equal to 450 degrees F and less than or equal to 1350 degrees F,
- iv. the 4-hour rolling average catalyst inlet temperature is maintained within the operating limitations for the catalyst inlet temperature established during the most recent performance test that demonstrated the emissions unit was in compliance, and
- v. the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the most recent performance test that demonstrated the emissions unit was in compliance.\*

\* As specified in d)(2), the monthly pressure drop monitoring for the catalytic oxidizer shall be performed while the emissions unit is operating at 100 percent load plus or minus 10 percent (i.e., from 90 percent load to 110 percent load).

- e. The permittee shall comply with all applicable requirements of 40 CFR Part 63 Subpart ZZZZ—Stationary Reciprocating Internal Combustion Engines (RICE). The permittee shall also comply with all the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 8 of 40 CFR Part 63 Subpart ZZZZ. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63 Subpart ZZZZ and Subpart A.
- f. The permittee must be in compliance with the emission limitations and operating limitations in this subpart that apply at all times.
- g. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.  
(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3))
- (2) The maximum annual operating hours for this emissions unit shall not exceed 3,500 hours, based upon a rolling, 12-month summation of the operating hours.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(D))

- (3) The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 1a of 40 CFR Part 63 Subpart ZZZZ apply.

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63 Subpart ZZZZ)

d) Monitoring and/or Recordkeeping Requirements

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

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall measure and record once per month the pressure drop across the catalyst to demonstrate that the pressure drop is within the operating limitation established during the most recent performance test. This monitoring shall be performed while the emissions unit is operating at 100 percent load plus or minus 10 percent (i.e., from 90 percent load to 110 percent load).

(Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63 Subpart ZZZZ)

- (3) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the operating hours for each month;
  - b. the rolling, 12-month summation of the operating hours;
  - c. the total emissions, in tons, for NO<sub>x</sub>, CO, VOC, PE/PM<sub>10</sub>, and SO<sub>2</sub> for each month; and
  - d. the updated rolling, 12-month summation emissions total, in tons, for NO<sub>x</sub>, CO, VOC, PE/PM<sub>10</sub>, and SO<sub>2</sub> (the total amount of emissions for the current month plus the total amount of emissions for the previous eleven calendar months).

(Authority for term: OAC rules 3745-77-07(C)(1), and 3745-31-05(D))

(4) Continuous Parameter Monitoring System (CPMS)

- a. The permittee shall install, operate, and maintain equipment to continuously monitor and record catalyst inlet temperature on this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 63.8.
- b. The permittee shall maintain records of all data obtained by the CPMS including, but not limited to, catalyst inlet temperature in degrees Fahrenheit, catalyst inlet

**Effective Date:** To be entered upon final issuance

temperature in degrees Fahrenheit in the appropriate averaging period (e.g., 4-hour rolling average), and results of daily CPMS response checks.

- c. The permittee shall maintain a written startup, shutdown, and malfunction plan for the CPMS as specified in 40 CFR Part 63.8 and 40 CFR Part 63.6(e)(3). Records related to startup, shutdown, and malfunctions shall be maintained as specified in 40 CFR Part 63.6(e)(3) and 40 CFR Part 63.10(b) and (c).
- d. The permittee shall maintain a written quality assurance/quality control plan for the continuous monitoring system designed to ensure continuous valid and representative readings, including daily and periodic data quality checks and performance testing of the continuous monitoring system. The plan shall follow the requirements of 40 CFR Part 63.8 and 40 CFR Part 63.10(b) and (c). The quality assurance/quality control plan, related records, and a logbook dedicated to the continuous monitoring system must be kept on site and available for inspection during regular office hours.

(Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63 Subpart ZZZZ)

- (5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 14-05536: d)(1)-d)(4). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

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

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the following:
  - a. the rolling, 12-month hours of operation limitation specified in c)(2); and
  - b. the rolling, 12-month emission limitations for NO<sub>x</sub>, CO, VOC, PE/PM<sub>10</sub>, and SO<sub>2</sub>.

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

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

- (3) As required in Table 7 of 40 CFR Part 63 subpart ZZZZ, the permittee shall submit a semi-annual report containing the information required in e)(4)a.-e)(4)d. noted below.

Following the initial compliance report, each subsequent report shall cover the reporting period from January 1 through June 30 and July 1 through December 31. The Semiannual Compliance Reports must be postmarked or delivered no later than July 31 and January 31.

- a. The compliance report must contain the following information:
  - i. company name and address;
  - ii. statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
  - iii. date of report and beginning and ending dates of the reporting period;
  - iv. if you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction;
  - v. if there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period; and
  - vi. if there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- b. Should the permittee be using a CMS to comply with the emission or operating limitations in 40 CFR Part 63 Subpart ZZZZ, the compliance report must contain the information specified in 40 CFR 63.6650(c)(1) through (4) and the information in 40 CFR 63.6650(d)(1) and (2).
- c. For each deviation from an emission or operating limitation occurring for a stationary RICE where the permittee is using a CMS to comply with the emission and operating limitations 40 CFR Part 63 Subpart ZZZZ, the permittee shall include information in 40 CFR 63.6650(c)(1) through (4) and 40 CFR 63.6650 (e)(1) through (12).
- d. Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from

any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(Authority for term: (OAC rule 3745-77-07(C)(1) and 40 CFR 63.6650))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 14-05536: e)(1)-e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitations:

0.88 lb/hr of PE/PM<sub>10</sub> and 0.03 lb/hr of SO<sub>2</sub>.

Applicable Compliance Methods:

The hourly emission limitations for SO<sub>2</sub> and PE/PM<sub>10</sub> are based upon the emissions unit's potential to emit and the manufacturer's guaranteed emissions data found in PTI 14-05536 submitted February 6, 2004.

If required, the permittee shall demonstrate compliance with the hourly PE/PM<sub>10</sub> emission limitation through emission tests performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

If required, the permittee shall demonstrate compliance with the hourly SO<sub>2</sub> emission limitation through emission tests performed in accordance with Methods 1-4 and 6 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

b. Emissions Limitation:

8.9 lbs/hr of NO<sub>x</sub>.

Applicable Compliance Method:

The hourly emission limitations for NO<sub>x</sub> was based upon the emissions unit's potential to emit and the manufacturer's guaranteed emissions data found in PTI 14-05536 submitted February 6, 2004. The lbs/hr emission limitation was

**Effective Date:** To be entered upon final issuance

verified in stack testing conducted on 8/18/05 when an average emission rate of 5.4 lbs/hr of NO<sub>x</sub> was recorded.

If required, the permittee shall demonstrate compliance with the hourly NO<sub>x</sub> emission limitation through emission tests performed in accordance with Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

c. Emissions Limitation:

3.2 lbs/hr of VOC.

Applicable Compliance Method:

The hourly emission limitation for VOC was based upon the emissions unit's potential to emit and the manufacturer's guaranteed emissions data found in PTI 14-05536 submitted February 6, 2004. The lbs/hr emission limitation was verified in stack testing conducted on 8/18/05 when an average emission rate of <0.2 lbs/hr of VOC was recorded.

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

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

d. Emission Limitation:

3.3 lbs of CO/hr and a mass emission reduction of at least 93 % for CO.

Applicable Compliance Method:

The hourly emission limitation for CO was based upon the emissions unit's potential to emit and the manufacturer's guaranteed emissions data found in PTI 14-05536 submitted February 6, 2004.

Compliance with the CO emission limitation and the mass emission reduction limitation for CO shall be determined by the continuous parametric monitoring data collected pursuant to the record keeping requirements specified in d)(4) and the emission testing required in f)(2).

Authority for term: (OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63 Subpart ZZZZ)

e. Emission Limitations:

15.5 TPY NO<sub>x</sub>\*; 5.75 TPY CO\*; 5.55 TPY VOC\*; 1.55 TPY PE/PM<sub>10</sub>\*; 0.05 TPY SO<sub>2</sub>\*

\*per rolling, 12-month period

**Effective Date:** To be entered upon final issuance

Applicable Compliance Method: Compliance with the TPY emission limitations is ensured by compliance with the hours of operation restriction in c)(2) and the lbs/hour emission limitations specified in b)(2)a.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

f. Emissions Limitation:

Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average.

Applicable Compliance Method:

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

(Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3), and 3745-17-03(B)(1))

g. Usage limitation:

The permittee shall burn only natural gas in this emissions unit.

Applicable Compliance Method:

Compliance with the fuel usage restriction will be demonstrated by the record keeping requirements in d)(1).

(Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3))

h. Usage limitation:

The maximum annual operating hours for this emissions unit shall not exceed 3,500 hours, based upon a rolling, 12-month summation of the operating hours.

Applicable Compliance Method:

Compliance with the annual operating hours limitation will be demonstrated by the record keeping requirements in d)(3)b.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D))

(2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The permittee shall conduct the performance test on an annual basis. If the result of an annual performance test indicates the emissions unit is not in compliance with the CO emission limitation or control efficiency requirement, semi-annual emission testing shall be resumed in accordance with 40 CFR 63.6615, Table 3.

- b. The mass emission rate for CO shall be determined by Methods 1-4 and Method 10 of 40 CFR Part 60, Appendix A.
- c. The control efficiency (i.e. the percent reduction in carbon monoxide mass emissions between the inlet and outlet of the catalytic oxidation system) shall be determined in accordance with the test methods and procedures specified in ASTM D6522-00 or Methods 3A and Method 10 of 40 CFR Part 60, Appendix A.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity within plus or minus 10 percent of 100 percent load, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. The catalyst pressure drop and catalyst inlet temperature shall be recorded during the test(s) at 15 minute intervals during each 1 hour test run.
- f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- g. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- h. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

Authority for term: (OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3), and 40 CFR Part 63 Subpart ZZZZ)

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install number 14-05536: f)(1)-f)(2). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

**Draft Title V Permit**

Miami University

**Permit Number:** P0097324

**Facility ID:** 1409090081

**Effective Date:** To be entered upon final issuance

g) Miscellaneous Requirements

(1) None.



**Effective Date:** To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Should the particulate emission limitation established in 40 CFR Part 63, Subpart DDDDD be more stringent than the particulate emission limitation established under OAC rule 3745-17-10(B)(1), the permittee shall comply with the more stringent emission limitation established under 40 CFR Part 63, Subpart DDDDD after the compliance date in 40 CFR Part 63, Subpart DDDDD.
d.	OAC rule 3745-17-10(C)(1)	<p>Particulate emissions (PE) shall not exceed 0.146 pound per MMBtu of actual heat input when burning coal.</p> <p>Should the particulate emission limitation established in 40 CFR Part 63, Subpart DDDDD be more stringent than the particulate emission limitation established under OAC rule 3745-17-10(C)(1), the permittee shall comply with the more stringent emission limitation established under 40 CFR Part 63, Subpart DDDDD after the compliance date in 40 CFR Part 63, Subpart DDDDD.</p>
e.	OAC rule 3745-18-06(A)	Fuel burning equipment is exempt from paragraphs (D), (F) and (G) of OAC rule 3745-18-06, and from rules 3745-18-07 to 3745-18-94 of the Administrative Code during any calendar day in which natural gas is the only fuel burned.
f.	OAC rule 3745-18-15(N)	SO <sub>2</sub> emissions shall not exceed 1.6 pound per million Btu when burning coal.
g.	40 CFR Part 63, Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This emissions unit is an existing stoker coal/solid fossil fuel unit.	<p>Applicable Emission Limits in Tables 1 and 2; Work Practice Standards in Table 3 and Operating Limits in Table 4 to Subpart DDDDD of 40 CFR Part 63 (subject to change based on the issuance of the Final Action on Reconsideration of 40 CFR Part 63, Subpart DDDDD by U.S. EPA).</p> <p>See b)(2)b.</p>
h.	40 CFR Part 64  Compliance Assurance Monitoring	Pursuant to 40 CFR 64.2(b), CAM will not apply to the MACT emission limitations or standards in 40 CFR Part 63, Subpart DDDDD, after the compliance date in that rule. See b)(2)a., d)(1)-d)(3) and e)(1).

(2) Additional Terms and Conditions

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

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 64)

- b. The requirements of 40 CFR Part 63, Subpart DDDDD are currently effective due to the January 9, 2012 decision by the United States District Court for the District of Columbia to vacate the administrative stay that U.S. EPA put in place during the reconsideration of the March, 2011 final rules. On February 7, 2012, U.S. EPA issued a "No Action Assurance" letter to facilities and indicated that U.S. EPA will exercise its enforcement discretion to not pursue enforcement action of violations of the Initial Notification deadlines established in the rule. This letter further notes that U.S. EPA has proposed revisions to the compliance dates for all units (the date by which a unit must be in compliance with the substantive requirements in the Boiler MACT rule) and to the subcategories for some units. U.S. EPA plans to issue a Final Action on Reconsideration of 40 CFR Part 63, Subpart DDDDD in the spring of 2012.

c) Operational Restrictions

- (1) The coal received for burning in this emissions unit shall have a sulfur content that, when calculated in terms of pounds of sulfur dioxide per million Btu of heat content, complies with the allowable sulfur dioxide emission limitation contained in this permit.

(Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-18-04(D))

d) Monitoring and/or Record Keeping Requirements

- (1) The permittee shall maintain on site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office verifying that the continuous opacity monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and

transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 64)

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

The permittee shall maintain records of data obtained by the continuous opacity monitoring system including the following:

- a. six-minute opacity averages; these six-minute averages shall be calculated from 36 or more data points equally spaced over each 6-minute period;
- b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;
- d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;
- e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; as well as; and
- f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

Authority for term: (OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 64).

- (3) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for visible particulate emissions is the opacity of the visible emissions from the baghouse stack as measured and recorded by the certified continuous opacity monitoring (COM) system. The visible particulate emissions indicator range is each three-hour rolling average with an opacity value greater than 20%. The three-hour rolling average opacity shall be based on the six-minute block averages recorded in d)(3)a. When the opacity value over the averaging period of the indicator range is greater than 20%, corrective action (including, but not limited to, an evaluation of the emissions unit and baghouse will be required.

Upon detecting an excursion of the visible particulate emission indicator range listed above, the owner or operator shall restore operation of the emissions unit (including the control device) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The

response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.h.

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

- (4) After the compliance date specified in 40 CFR Part 63, Subpart DDDDD, the PM monitoring requirements specified in 40 CFR section 63.7525 will replace the monitoring requirements of 40 CFR Part 64 specified in d)(1)-d(3).

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

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

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

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-04(D)(9)(c))

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

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-04(D))

- (7) The permittee shall operate and maintain equipment to continuously monitor and record O<sub>2</sub> emitted from this emissions unit in percent O<sub>2</sub> for the control of excess air.

**Effective Date:** To be entered upon final issuance

The permittee shall maintain records of data obtained by the continuous O<sub>2</sub> monitoring system. Calibrations shall be according to manufacturer's recommendations. The permittee shall record calibration results of zero/span calibration checks, the magnitude of manual calibration adjustments, and the date of the calibration.

A logbook dedicated to the continuous O<sub>2</sub> monitoring system must be kept onsite and available for inspection during regular office hours.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3))

- (8) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install 18-060 and 14-05969: d)(1)-d)(7). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

- (1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:
- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance.
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous opacity monitor;
    - iii. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
    - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

**Effective Date:** To be entered upon final issuance

- v. the total operating time (hours) of the emissions unit;
- vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
- vii. the date, time, and duration of any/each malfunction\*\* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
- viii. the date, time, and duration of any downtime\*\* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
- ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

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

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

\*\* each downtime and malfunction event shall be reported regardless if there is an exceedance of the opacity limit.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 64).

- (2) After the compliance date specified in 40 CFR Part 63, Subpart DDDDD, the reporting requirements specified in 40 CFR section 63.7550 will replace the reporting requirements of 40 CFR Part 64 specified in e)(1).

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

- (3) The permittee shall submit quarterly reports on the quality and quantity of coal received for burning in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
  - a. the total quantity of coal received (tons);
  - b. the average ash content (percent) of the coal received;
  - c. the average sulfur content (percent) of the coal received;
  - d. the average heat content (Btu/pound) of the coal received; and
  - e. the calculated, average sulfur dioxide emission rate (pounds sulfur dioxide/MMBtu actual heat input) for the coal received.

Compliance with the sulfur dioxide emission limit shall be determined each month by calculating the average monthly sulfur dioxide emission rate using the results of the analyses of the monthly composite sample for sulfur content and heat content.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the data obtained during the previous calendar quarters.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-18-04(D))

- (4) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install 18-060 and 14-05969: e)(1)-e)(3). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitation:

Visible particulate emissions (PE) shall not exceed twenty percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Ongoing compliance with the opacity limitation contained in this permit, 40 CFR Part 60, and any other applicable standard(s) 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.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR 60.13 and 40 CFR Part 60, Appendix B).

b. Emission Limitations:

0.020 lb of PE/MMBtu of actual heat input when burning natural gas; and

0.146 lb of PE/MMBtu of actual heat input when burning coal.

Applicable Compliance Method when burning natural gas-

When burning natural gas, compliance may be determined by multiplying the hourly gas burning capacity of the emissions unit (MM cu. ft/hr) by the AP-42,

**Effective Date:** To be entered upon final issuance

Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lb of filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (MMBtu/hr).

Applicable Compliance Method when burning coal-

Compliance may be demonstrated by PE stack testing required in f)(2).

If required for natural gas, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 1-5 of 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-17-10(B)(1) and 3745-17-10(C)(1))

c. Emission Limitations:

1.6 lbs of SO<sub>2</sub>/MMBtu of actual heat input when burning coal.

Applicable Compliance Method when burning coal-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the calculated sulfur dioxide emission rate for each monthly composite sample of coal meets the sulfur dioxide emission limitation.

Sulfur dioxide emissions from solid fuel samples shall be calculated as follows:

$$ER = (1 \times 10^6) / H \times S \times 1.9$$

where:

ER = the emission rate in pounds of sulfur dioxide per MM Btu;

H = the heat content of the solid fuel in Btu per pound; and

S = the decimal fraction of sulfur in the solid fuel.

If required, the permittee shall demonstrate compliance with the lb/MMBtu emission limitations in accordance with USEPA reference Method 6, Method 6A, Method 6B, or Method 6c, whichever is appropriate, of 40 CFR, Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-18-15(N), and OAC rule 3745-18-04(F)(1))

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

**Effective Date:** To be entered upon final issuance

- a. The emission testing shall be conducted within six-months after final permit issuance. Future stack testing will be determined by the frequency established in Ohio EPA Engineering Guide 16.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE when burning coal.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):  
  
Methods 1-5 of 40 CFR Part 60 Appendix A.  
  
Alternative U.S. EPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Department of Environmental Services.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the appropriate Ohio EPA District Office or local air agency refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B))

- (3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install number 18-060 and 14-05969: f)(1)-f)(2). The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

- (1) A control equipment upgrade project at Miami University was approved under PTI 14-05969, issued on October 23, 2007, to enable the permittee to prepare for future 40 CFR Part 63 Subpart DDDDD emission requirements for boilers. This project included the installation of scrubber and baghouse equipment which resulted in a change to the flue gas exhaust parameters of the coal-fired boilers (emissions units B010, B011, and B012). Based upon modeling performed by the permittee, the change in the exhaust parameters had the potential of increasing the ambient air impact for SO<sub>2</sub> greater than 15 ug/m<sup>3</sup> as a 24-hour average. This increase triggered a state-only requirement for a permit modification pursuant to the definition of modification under OAC rule 3745-31-01(QQQ)(1)(b) and requirements under OAC rule 3745-31-02(A)(1)(a). Per OAC rule 3745-31-05(A)(3)(a)(iii), this type of modification did not trigger best available technology requirements for these emissions units.

The permittee provided an air dispersion modeling assessment for the existing coal-fired boilers with the application for PTI 14-05969 in accordance with the requirements of Ohio EPA's Engineering Guide #69, dated 2003. The modeling submitted by the permittee demonstrated that the increase in SO<sub>2</sub> concentration as a result of the control equipment upgrade project will not cause or contribute to a violation of a National Ambient Air Quality Standard (NAAQS) and/or Prevention of Significant Deterioration (PSD) increment violation.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-02(A))