

8/23/2012

Certified Mail

Michael Valigosky  
University of Toledo Health Science Campus  
3000 Arlington Ave  
Toledo, OH 43614-2598

Facility ID: 0448010247  
Permit Number: P0088114  
County: Lucas

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, Toledo Blade. 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 Toledo Department of Environmental Services  
348 South Erie Street  
Toledo, OH 43604

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 Toledo Department of Environmental Services at (419)936-3015.

Sincerely,

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

Cc: U.S. EPA Region 5 -Via E-Mail Notification  
TDES; Michigan; Indiana



PUBLIC NOTICE  
8/23/2012 Issuance of Draft Air Pollution Title V Permit

University of Toledo Health Science Campus  
3000 Arlington Ave,  
Toledo, OH 43614-2598  
Lucas County  
FACILITY DESC.: Colleges, Universities, and Professional Schools  
PERMIT #: P0088114  
PERMIT TYPE: Renewal  
PERMIT DESC: Renewal of Title V operating permit

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/permitsonline.aspx> by entering the permit # or: Babak Firoozi, Toledo Department of Environmental Services, 348 South Erie Street, Toledo, OH 43604. Ph: (419)936-3015





## Statement of Basis For Air Pollution Title V Permit

Facility ID:	0448010247
Facility Name:	University of Toledo Health Science Campus
Facility Description:	Medical university and hospital
Facility Address:	3000 Arlington Ave, Toledo, OH 43614-2598
Permit #:	P0088114, Renewal
This facility is subject to Title V because it is major for: <input type="checkbox"/> Lead <input checked="" type="checkbox"/> Sulfur Dioxide <input checked="" type="checkbox"/> Carbon Monoxide <input type="checkbox"/> Volatile Organic Compounds <input checked="" type="checkbox"/> Nitrogen Oxides <input checked="" type="checkbox"/> Particulate Matter ≤ 10 microns <input type="checkbox"/> Single Hazardous Air Pollutant <input type="checkbox"/> Combined Hazardous Air Pollutants <input type="checkbox"/> Maximum Available Control Technology Standard(s) <input checked="" type="checkbox"/> <b>GHG</b>	

### 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 [common control] 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



<p>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)</p>	<p>N/A</p>
<p>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)</p>	<p><b>B001-B004</b> The Title V permit issued 6/29/2001 contained an alternate operating scenario whereby the facility had the option to burn either high sulfur or low sulfur coal. Emissions from burning low sulfur coal were vented to an electrostatic precipitator, and emissions from burning high sulfur coal were vented to a baghouse and scrubber. The permittee has requested to remove the option to burn high sulfur coal, and now only burns as received sulfur compliant coal.</p> <p>Added monitoring &amp; recordkeeping requirement to calculate the SO2 emission rate in lb/mmBtu heat input for each monthly composite coal sample.</p> <p>Added coal usage restriction from PTI P0108859</p> <p>Added requirement to submit reports electronically through the eBusiness Center.</p> <p>Added 40 CFR Part 63, Subpart JJJJJ requirements</p> <p>Added CAM requirements</p> <p>Added SO2 and PE stack testing requirement within 6 months of permit renewal.</p> <p><b>B004</b> The previous Title V permit for B004 cited OAC rule 3745-18-54(P) (1.5 lb SO2/mmBtu) as an applicable rule, however, this citation refers to B001-B003 and does not include B004. The applicable rule for B004 is OAC rule 3745-18-54(A) (1.6 lb SO2/mmBtu) and is specified in this permit.</p> <p><b>B003</b> The primary fuel burned in this emissions unit is natural gas, however, it can be fired with coal. A requirement was added to maintain daily records of the type of fuel burned in this emissions unit (coal or gas). This term was needed, because the permittee is not required to continuously monitor the opacity of</p>



	<p>emissions when burning natural gas, and there needs to be a record of the periods when coal is fired to know what periods continuous opacity monitoring is required. A reporting requirement was also added to the quarterly continuous opacity monitoring reporting requirement to identify all periods during which coal was burned in this emissions unit.</p> <p>OAC rule 3745-18-06(G) was added as an applicable requirement.</p> <p><b>P001, P101, P102, P105</b> Added OAC rule 3745-18-06(G) as an applicable requirement along with associated M, R, &amp;Rp.</p> <p>Added requirement to perform weekly VE checks.</p> <p>Added requirement to submit reports electronically through the eBusiness Center.</p> <p>Added 40 CFR Part 63, Subpart ZZZZ.</p> <p><b>B008 – B011, and B013</b> Added these new boilers to permit as permitted under PTI P0108910 issued 11/23/2011 and P0108861 issued 1/20/2012</p> <p><b>P001, P101, P102, and P105</b> Permit-by-Rule #09899 was issued for these emissions units to re-classify them as emergency electrical generators.</p>
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**B. Facility-Wide Terms and Conditions**

Term and Condition (paragraph)	Basis		<u>Comments</u>
	SIP (3745- )	Other	
1., 7.		Y	De minimis emissions unit requirements are state-only enforceable
2.		Y	Basis: MACT JJJJJJ applies to B001-B004



3.		Y	Basis: 40 CFR Part 63, Subpart ZZZZ applies to P001, P101, P102, and P105
3., 4., 5.		Y	Basis: OAC rule 3745-31-05(D) PTI P0108859 – synthetic minor restriction to avoid major source MACT requirements. PTI P0108859 added a facility-wide limitation of 9.9 tons/yr individual HAP and 24.9 tons/yr combined HAP to avoid major source HAP MACT requirements under 40 CFR Part 63, Subpart DDDDD. This permit also added coal usage restrictions at B001-B004 that serve to restrict HAP facility-wide HAP emissions to less than 10 tons/yr individual HAP and less than 25 tons/yr for combined HAP. The Permit Strategy Write-Up for P0108859 demonstrated by calculations that by restricting coal usage at B001-B004 to 16,500 tons per year as a rolling, 12-month summation and adding the potential to emit for all other emissions units at the facility that the facility-wide PTE for individual HAP is < 10 tons/yr and combined HAP < 25 tons/yr.
6.		Y	Basis: OAC rule 3745-77-(A)(13) – insignificant emissions units

**C. Emissions Unit Terms and Conditions**

<p><b>Key:</b>          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</p>															
EU(s)	Limitation	Basis		ND	OR	M	St	ENF	R	St	Rp	St	ET	Misc	<u>Comments</u>
		SIP (3745- )	Other												
B003	The maximum annual coal usage rate for emissions units B001, B002, B003, and B004 combined shall not exceed 16,500 tons per year, based on a rolling, 12-month summation of the coal usage rates.		Y	N	N	Y	N	N	Y	N	Y	N	N	N	Basis: OAC rule 3745-31-05(D) as established by PTI P0108859 issued 12/15/2011. This coal usage restriction was added to serve as a restriction on the potential to emit for the coal-fired boilers so that the facility-wide potential to emit for HAP is restricted to less than 10 tons/yr of a single HAP and 25 tons/yr for any combination of HAP. The potential HCl emissions from B001-B004 are calculated to be 9.9 tons/yr based on the HCl emission factor of 1.2 lb/ton from AP-42 Section 1.1 dated 9/98.



	20% opacity as a 6-min average	17-07(A)(1)		N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	<p>CAM – 20% opacity as a 6-minute average, secondary voltage ≥ 40 kilovolts, and flue gas temperature ≥ 342 °F</p> <p>St: M, R, &amp;Rp requirements were streamlined with PTI P0108859 issued 12/15/2011 to more clearly identify what requirements do not apply when only natural gas is burned during a calendar quarter.</p> <p>MISC: the ESP may be bypassed when combusting solely natural gas and compliance with the visible emission limitation is maintained. M,R,Rp requirements to identify all periods during which coal is burned are included</p>
	0.020 lb PE/mmBtu (gas)	17-10(B)(1)		N	N	Y	Y	N	Y	Y	Y	Y	N	N	<p>CAM: when burning solely natural gas, the permittee may bypass the COMS. The permittee is required to maintain daily records of type of fuel burned.</p> <p>ET: PE testing is not required per Engineering Guide #16 when solely combusting natural gas.</p> <p>St: St: M, R, &amp;Rp requirements were streamlined with PTI P0108859 issued 12/15/2011 to more clearly identify what requirements do not apply when only natural gas is burned during a calendar quarter.</p> <p>MISC: the ESP may be bypassed when combusting solely natural gas and compliance with the allowable particulate emission limitation is maintained. Compliance with the particulate emission limitation is assumed provided that compliance with the visible emission limitation is maintained.</p>



	0.14 lb PE/mmBtu (coal)	17-10(C)(1)		N	N	Y	N	Y	Y	Y	N	Y	N	CAM: 20% opacity as a 6-minute average, secondary voltage ≥ 40 kilovolts, and flue gas temperature ≥ 342 °F	
	1.5 lb SO2/mmBtu	18-54(P)		N	Y	Y	N	N	Y	N	Y	N	Y	N	CAM: Not applicable to SO2 since uncontrolled  OR: coal sulfur content restriction – associated M,R, Rp is included
		110-03		Y										ND: The NOx RACT requirements of OAC rule 3745-110-03 do not apply to this emissions unit, since this existing source is not located in a county listed in OAC rule 3745-110-02(A)(1)(b).	
	0.0000048 lb Hg/mmBtu when burning coal		Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Basis: 40 CFR Part 63, Subpart JJJJJJ  CAM: not applicable  OR: operating limits per rule with associated M,R,Rp  Comment: as specified by the rule, this requirement does not go into effect until 3/21/2014  ET: MACT JJJJJJ specifies stack testing requirements



	400 ppmvd CO when burning coal		Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Basis: 40 CFR Part 63, Subpart JJJJJJ CAM: not applicable OR: operating limits per rule w/associated M,R,RP ET: MACT JJJJJJ specifies stack testing requirements
B004	The maximum annual coal usage rate for emissions units B001, B002, B003, and B004 combined shall not exceed 16,500 tons per year, based on a rolling, 12-month summation of the coal usage rates		Y	N	N	Y	N	N	Y	N	Y	N	N	N	Basis: OAC rule 3745-31-05(D) as established by PTI P0108859 issued 12/15/2011. This coal usage restriction was added to serve as a restriction on the potential to emit for the coal-fired boilers so that the facility-wide potential to emit for HAP is restricted to less than 10 tons/yr of a single HAP and 25 tons/yr for any combination of HAP. The potential HCl emissions from B001-B004 are calculated to be 9.9 tons/yr based on the HCl emission factor of 1.2 lb/ton from AP-42 Section 1.1 dated 9/98.
	20% opacity as a 6-min average	17-07(A)(1)		N	N	Y	N	N	Y	N	Y	N	Y	N	CAM: 20% opacity as a 6-minute average, secondary voltage ≥ 40 kilovolts, and flue gas temperature ≥ 342 °F
	0.14 lb PE/mmBtu	17-10(C)(1)		N	N	Y	N	N	Y	N	Y	N	Y	N	CAM: 20% opacity as a 6-minute average, secondary voltage ≥ 40 kilovolts, and flue gas temperature ≥ 342 °F
	1.6 lb SO2/mmBtu	18-54(A)		N	Y	Y	N	N	Y	N	Y	N	Y	N	CAM: Not applicable to SO2 since uncontrolled OR: coal sulfur content restriction – associated M,R, Rp is included



		110-03		Y											ND: The NOx RACT requirements of OAC rule 3745-110-03 do not apply to this emissions unit, since this existing source is not located in a county listed in OAC rule 3745-110-02(A)(1)(b).
	0.0000048 lb Hg/mmBtu		Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Basis: 40 CFR Part 63, Subpart JJJJJJ CAM: not applicable OR: operating limits per rule with associated M,R,Rp ET: MACT JJJJJJ specifies stack testing requirements
	400 ppmvd CO		Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Basis: 40 CFR Part 63, Subpart JJJJJJ CAM: not applicable OR: operating limits per rule w/associated M,R,RP ET: MACT JJJJJJ specifies stack testing requirements
B001, B002	The maximum annual coal usage rate for emissions units B001, B002, B003, and B004 combined shall not exceed 16,500 tons per year, based on a rolling, 12-month summation of the coal usage rates		Y	N	N	Y	N	N	Y	N	Y	N	N	N	Basis: OAC rule 3745-31-05(D) as established by PTI P0108859 issued 12/15/2011. This coal usage restriction was added to serve as a restriction on the potential to emit for the coal-fired boilers so that the facility-wide potential to emit for HAP is restricted to less than 10 tons/yr of a single HAP and 25 tons/yr for any combination of HAP. The potential HCl emissions from B001-B004 are calculated to be 9.9 tons/yr based on the HCl emission factor of 1.2 lb/ton from AP-42 Section 1.1 dated 9/98.
	20% opacity as a 6-min average	17-07(A)(1)		N	N	Y	N	N	Y	N	Y	N	Y	N	CAM: 20% opacity as a 6-minute average, secondary voltage ≥ 40 kilovolts, and flue gas temperature ≥ 342 °F
	0.14 lb PE/mmBtu	17-10(C)(1)		N	N	Y	N	N	Y	N	Y	N	Y	N	CAM: 20% opacity as a 6-minute average, secondary voltage ≥ 40 kilovolts, and flue gas temperature ≥ 342 °F



	1.5 lb SO2/mmBtu	18-54(P)		N	Y	Y	N	N	Y	N	Y	N	Y	N	CAM: Not applicable to SO2 since uncontrolled OR: coal sulfur content restriction – associated M,R, Rp is included
		110-03		Y											ND: The NOx RACT requirements of OAC rule 3745-110-03 do not apply to this emissions unit, since this existing source is not located in a county listed in OAC rule 3745-110-02(A)(1)(b).
	0.0000048 lb Hg/mmBtu		Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Basis: 40 CFR Part 63, Subpart JJJJJJ CAM: not applicable OR: operating limits per rule with associated M,R,Rp  ET: MACT JJJJJJ specifies stack testing requirements
	400 ppmvd CO		Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Basis: 40 CFR Part 63, Subpart JJJJJJ CAM: not applicable OR: operating limits per rule w/associated M,R,RP ET: MACT JJJJJJ specifies stack testing requirements



<p>B008, B009, B010, B011, B013</p>	<p>0.082 lb CO /mmBtu (gas); 0.040 lb CO/mmBtu (oil) and 9.27 tons/yr CO;</p> <p>0.0075 lb PE/mmBtu (gas); 0.040 lb PE/mmBtu (oil) and 1.21 tons/yr PE;</p> <p>0.011 lb OC/mmBtu (gas); 0.004 lb OC/mmBtu (oil); 1.24 tons OC/yr;</p> <p>0.01lbSO2/mmBtu (gas); 0.05 lb SO2/mmBtu (oil); 2.86 tons/yr SO2</p>		Y	N	Y	Y	N	N	Y	N	Y	N	N	N	<p>Basis: OAC rule 3745-31-05(A)(3) as effective 11/30/2001 (BAT) as established by PTI P0108861 issued 1/20/2012 and P0108910 issued 11/23/2011. Once the 2006 version of OAC rule 3745-31-05 is approved as part of Ohio's state implementation plan, these emission limitations will no longer apply since the uncontrolled potential to emit for CO, PE, and OC is less than 10 tons per year, and the potential to emit taking into consideration the federally enforceable limitation of distillate oil with ≤ 0.05% sulfur by weight established under OAC rule 3745-31-05(D) restricts SO2 emissions to less than 10 tons per year.</p> <p>CAM is not applicable – these emissions units do not employ air pollution control equipment.</p> <p>OR: distillate oil is restricted to a sulfur content of ≤ 0.05% by weight</p> <p>Emission testing is not required per Engineering Guide #16 due to low emission levels.</p>
	<p>0.080 lbNOx/mmBtu (gas); and 0.190 lbNOx/mmBtu (oil)</p>		Y	N	N	N	N	N	N	N	N	N	N	N	<p>Basis: ORC 3704.03(T) (BAT) as established by PTI P0108861 issued 1/20/2012 and P0108910 issued 11/23/2011.</p> <p>M, R, Rp: not needed for this emission limitation, since this limitation is based on the unrestricted potential to emit</p> <p>ET: no emission testing is required by Engineering Guide #16 due to the low emission level.</p>



	<p>The combined emissions from B008-B011 and B013 shall not exceed the following per rolling 12-month period: 31.51 tons CO; 39.20 tons NOx; 3.46 tons PE; 3.16 tons SO2; and 4.15 tons OC.</p> <p>SO2 emissions shall not exceed 0.05 lb SO2/mmBtu when combusting distillate fuel oil.</p>		Y	N	Y	Y	Y	N	Y	Y	N	Y	N	N	<p>Basis: OAC rule 3745-31-05(D) – synthetic minor restrictions on emissions established under PTI P0108910 issued 11/23/2011 and P0108861 issued 1/20/2012 to avoid PSD requirements for NOx and SO2. The SO2 limitation of 0.05 lb SO2/mmBtu served to allow the emissions unit to avoid state modeling requirements.</p> <p>OR: fuel usage is restricted to 700,000 mscf natural gas/rolling, 12-month period and 800,000 gallons fuel oil/rolling, 12-month period for B008 through B011 and B013 combined.</p> <p>ST: The monitoring requirement contained in PTI P0108910 and P0108861 for maintaining monthly records of the total natural gas usage rate for B008-B011 and B013 combined is streamlined here, because the PTIs indicate “the total natural gas usage rate (in mscf, <i>on an as received basis</i>) for each month for B008, B009, B010, B011, and B013 combined”. The streamlined term removes “on an as received basis”, because it serves no purpose due to there not being any onsite storage for natural gas. The “on an as received basis” only applies to the fuel oil term since there is onsite storage of fuel oil.</p> <p>ET: emission testing is not required by Engineering Guide #16 due to the low level of emissions.</p>
	20% opacity as a 6-min average	17-07(A)(1)		N	Y	Y	N	N	Y	N	Y	N	N	N	<p>OR: shall only burn natural gas or No. 2 fuel oil with ≤ 0.05% sulfur</p> <p>ET: not required per Engineering Guide #16 due to low PTE</p>



	0.020 lb/mmBtu PE	17-10(B)(1)		N	Y	Y	N	N	Y	N	Y	N	N	N	OR: shall only burn natural gas or No. 2 fuel oil with ≤ 0.05% sulfur  ET: not required per Engineering Guide #16 due to low PTE
	1.6 lb SO <sub>2</sub> /mmBtu	18-06(D)		N	y	y	N	n	y	N	y	N	N	N	Basis: this emission limitation is less stringent than the emission limitation of 0.05 lb SO <sub>2</sub> /mmBtu heat input established by OAC rule 3745-31-05(D).
	0.50 lb SO <sub>2</sub> /mmBtu		Y	N	Y	Y	N	N	Y	N	Y	N	N	N	Basis: 40 CFR Part 60, Subpart Dc (60.42c(d))- this emission limitation is less stringent than the emission limitation of 0.05 lb SO <sub>2</sub> /mmBtu established under OAC rule 3745-31-05(D).
	0.03 lb PM/mmBtu		Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	Basis: 40 CFR Part 63, Subpart JJJJJJ. Note that this emissions unit is not subject to the requirements of 40 CFR Part 63, Subpart JJJJJJ when operated as a gas-fired boiler as defined under 63.11237.  Per 63.11237, a gas-fired boiler is defined as includes any boiler that burns gaseous fuels not combined with any solid fuels, <i>burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.</i>
P001, P101, P102, P105	20% opacity as a 6-min average	17-07(A)(1)		N	N	Y	N	N	Y	N	Y	N	N	N	CAM –not applicable ET: not required per Engineering Guide #16 due to low PTE
	0.310 lb PE/mmBtu	17-11(B)(5)(a)		N	N	Y	N	N	Y	N	Y	N	N	N	CAM – not applicable ET: Not required per Engineering Guide # 16 due to the low PTE.



	0.5 lb SO2/mmBtu	18-06(G)		N	Y	Y	N	N	Y	N	Y	N	N	N	CAM is not applicable OR: sulfur content of fuel restriction – associated M,R, and Rp is included ET: not required since compliance is determined through fuel supplier records and actual emissions for each of the last 5 years was less than 1 ton/yr per engine.
		110-03		Y	N	N	N	N	N	N	N	N	N	N	ND: These emissions units are existing sources (installed prior to 1/1/2008) located Lucas County. Lucas County is not a county listed under 3745-110-02(A)(1)(b) which identifies the counties in Ohio where 3745-110-03 requirements apply to existing sources.
	CO shall not exceed 23 ppmvd at 15% O2 or CO shall be reduced by 70% or more.		Y	N	Y	Y	N	N	Y	N	Y	N	Y	N	CAM: not applicable  Basis: 40 CFR Part 63, Subpart ZZZZ  OR: exhaust catalyst temperature and pressure drop requirements, minimize startup & idle time  ET: 40 CFR Part 63, Subpart ZZZZ specifies CO emission testing requirements
	fuel must meet: a maximum sulfur content of 15 ppm; and a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.		Y	N	N	Y	N	N	Y	N	Y	N	N	N	Basis: 40 CFR Part 63, Subpart ZZZZ  ET: monitoring & recordkeeping requirements will be used to demonstrate compliance





**DRAFT**

**Division of Air Pollution Control**  
**Title V Permit**  
for  
University of Toledo Health Science Campus

Facility ID:	0448010247
Permit Number:	P0088114
Permit Type:	Renewal
Issued:	8/23/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance





Division of Air Pollution Control
Title V Permit
for
University of Toledo Health Science Campus

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## Authorization

Facility ID: 0448010247  
Facility Description: Medical college and hospital  
Application Number(s): A0019251, A0019252, A0019253, A0044410  
Permit Number: P0088114  
Permit Description: Renewal of Title V operating permit  
Permit Type: Renewal  
Issue Date: 8/23/2012  
Effective Date: To be entered upon final issuance  
Expiration Date: To be entered upon final issuance  
Superseded Permit Number: P0088113

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

University of Toledo Health Science Campus  
3000 Arlington Ave  
Toledo, OH 43614-2598

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

Toledo Department of Environmental Services  
348 South Erie Street  
Toledo, OH 43604  
(419)936-3015

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 Toledo Department of Environmental Services. 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

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 Toledo Department of Environmental Services.

*(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) 7.

2. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart JJJJJJ: B001, B002, B003, B004, B008, B009, B010, B011, and B013. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the Toledo Division of Environmental Services.

1. The total emissions from all emissions units at this facility combined shall not exceed 9.9 tons per year of any hazardous air pollutant (HAP) and 24.9 tons per year of any combination of HAP, based upon a rolling, 12-month summation of emission rates.

[OAC rule 3745-31-05(D) as established in PTI P0108859]

2. The permittee shall maintain records of the monthly and the rolling, 12-month summation of the facility-wide emissions of each HAP and total combined HAP.

[OAC rule 3745-31-05(D) as established in PTI P0108859]

3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a) any exceedance of the HAP limitations specified in 3.

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

[OAC rule 3745-31-05(D) as established in PTI P0108859]

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

B005 – Heatherdowns Boiler 1 (OAC rule 3745-31-03(A)(1)(a))

B006 – Heatherdowns Boiler 2 (OAC rule 3745-31-03(A)(1)(a))

B007 – Heatherdowns boiler 3 (OAC rule 3745-31-03(A)(1)(a))

P001 – Powerhouse Emergency Generator - 900 kW diesel-fired (PBR09899)

P002 – Dowling Hall Generator #2 – 260 kW diesel-fired electrical generator (PBR06589)

P004 – GMC generator (PBR09156)

P005 – Coroner Generator (PBR09156)



- P007 - Emergency Generator for FSB and FSB Steam Plant 757 HP (PBR08429)
- P101 – Hospital Emergency Generator #1 - 750 kW diesel-fired (PBR09899)
- P102 – Hospital Emergency Generator #2 - 750 kW diesel-fired (PBR09899)
- P103 – Rupert Health Center diesel generator, 75 kW Emergency standby (PBR09156)
- P104 – Dowling Hall diesel generator – 250 kW Emergency standby (PBR09156)
- P105 – Health Education Emergency Generator - 750 kW diesel-fired (PBR09899)
- P106 – Dowling Hall Generator #3 - 1,350 HP diesel-fired emergency electrical generator (PBR08429)
- T008 – FSB Steam plant 25,000 gallon underground fuel oil storage tank

[Authority for term: OAC rule 3745-77-07(A)(13)]

5. The following insignificant emissions units are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the “de minimis” criteria established in OAC rule 3745-15-05:

- F001 – Roadways and Parking Areas (de minimis)
- F002 – Coal storage piles (de minimis)
- F003 – Railcar and truck coal unloading (de minimis)
- F004 – Ash exhauster and unloader at powerhouse(de minimis)
- G001 – Gasoline dispensing facility under 120,000 gallons (de minimis)
- P008 – Lab fume hoods (de minimis)
- T001 – Health Education 8,000 gallon diesel storage tank (de minimis)
- T002 – Dowling Hall 5,000 gallon diesel storage tank (de minimis)
- T003 – Hospital 10,000 gallon diesel storage tank (de minimis)
- T004 – Facility Support 1,500 and 500 gallon diesel storage tank (de minimis)
- T006 – Steam Plant 4,000 gallon diesel storage tank (de minimis)
- T007 – Coroner Generator 500 gallon diesel tank (de minimis)
- T009 – Heatherdowns Fuel Oil Tank #1 10,000 gallon (de minimis)
- T010 - Heatherdowns Fuel Oil Tank #2 10,000 gallon (de minimis)

## C. Emissions Unit Terms and Conditions



1. B003, Boiler No. 3

Operations, Property and/or Equipment Description:

Wickes 93.3 mmBtu/hr boiler. When fired with coal, emissions are controlled by electrostatic precipitator. When fired with only natural gas, the electrostatic precipitator stack is bypassed.

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(D) (PTI P0108859 issued 12/15/2011)  Synthetic minor restrictions for purposes of avoiding 40 CFR Part 63, Subpart DDDDD	See b)(2)d. and Sections B.3, B.4, and B.5.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	When burning natural gas, PE shall not exceed 0.020 pound per million Btu of actual heat input.
d.	OAC rule 3745-17-10(C)(1)	When burning coal, PE shall not exceed 0.14 pound per million Btu of actual heat input.
e.	OAC rule 3745-18-54(P)	Sulfur dioxide (SO2) emissions shall not exceed 1.5 pounds of sulfur dioxide per million Btu actual heat input.
f.	OAC rule 3745-110-03	exempt – see b)(2)e.
g.	40 CFR Part 63, Subpart JJJJJJ (40 CFR 63.11193 – 63.11237)  [In accordance with 40 CFR 63.11201(a) and Table 1 to Subpart JJJJJJ, this emissions unit is an	Mercury (Hg) emissions when burning coal shall not exceed 0.0000048 pound per million Btu of heat input.  Carbon monoxide (CO) emissions when burning coal shall not exceed 400 parts



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	existing affected boiler with a maximum heat input of greater than 10 mmBtu/hr that is capable of burning coal or natural gas as fuel subject to the emissions limitations/control measures specified in this section.]	per million by volume on a dry basis corrected to 3 percent oxygen.  See b)(2)c. and b)(2)f.
h.	40 CFR 63.1 – 16 (40 CFR 63.11235)	Table 8 to Subpart JJJJJJ of 40 CFR Part 63 – Applicability of General Provisions to Subpart JJJJJJ shows which parts of the General Provisions in 40 CFR Part 63.1-16 apply.
i.	40 CFR Part 64 (40 CFR 64.1 – 64.10)  [In accordance with 40 CFR 64.2(a), this emissions unit uses a control device to achieve compliance with the applicable PE limitation when burning coal, and pre-control PE are greater than 100 tons per year when burning coal and is subject to the requirements of this rule.]	See d)(1), d)(2), d)(7), d)(8), e)(2)

(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.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

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

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix B to 40 CFR Part 60]



- c. The permittee shall comply with the emission limits and energy assessment requirements specified by this rule no later than March 21, 2014.
[40 CFR 63.11196(a)(2), (3)]
d. The maximum annual coal usage rate for emissions units B001, B002, B003, and B004 combined shall not exceed 16,500 tons per year, based upon a rolling, 12-month summation of the coal usage rates.
e. The NOx RACT requirements of OAC rule 3745-110-03 do not apply to this emissions unit, since this existing source is not located in a county listed in OAC rule 3745-110-02(A)(1)(b).
f. If this emissions unit is only operated as a gas-fired boiler as defined under 40 CFR 63.11237, then this emissions unit is not required to comply with 40 CFR Part 63, Subpart JJJJJJ or to any requirements in 40 CFR Part 63, Subpart JJJJJJ.

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.
[OAC rule 3745-18-04(D)] and [OAC rule 3745-77-07(A)(1)]
(2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:

Table with 2 columns: CFR Reference and Description. Rows include 63.11201(b), 63.11201(c), 63.11205(a), 63.11211(b), and 63.11214(d), 63.11223(c).

d) Monitoring and/or Recordkeeping Requirements

- (1) The following monitoring & recordkeeping requirements do not apply during any calendar quarter when only natural gas is fired in this emissions unit: d)(3) and d)(9).
[OAC rule 3745-77-07(C)(1)]

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

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

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

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

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

- a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;
- b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;
- d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;
- e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; as well as,
- f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (4) The permittee shall maintain daily records of the type of fuel burned (i.e. coal or gas) in this emissions unit.

[OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall collect a representative sample of each shipment of coal which is received for burning with a minimum of 1 sample per truck load or railcar load. 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.

[OAC rule 3745-18-04(D)(3)(b)] and [OAC rule 3745-77-07(C)(1)]

- (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.

[OAC rule 3745-18-04(D)] and [OAC rule 3745-77-07(C)(1)]

- (7) The permittee shall calculate and record the average monthly sulfur dioxide emission rate for each monthly composite fuel sample analyzed under d)(4) as follows:

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

where: ER = the emission rate in pounds of sulfur dioxide per MMBtu;

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

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

[OAC rule 3745-18-04(F)(1)] and [OAC rule 3745-77-07(C)(1)]

- (8) The permittee shall maintain monthly records of the following information:
- a. the coal usage rate, in tons, for this emissions unit; and
  - b. the rolling, 12-month summation of the coal usage rates, in tons, for emissions units B001, B002, B003, and B004 combined.
- (9) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions are the opacity of the visible particulate emissions from the electrostatic precipitator exhaust stack, the electrostatic precipitator secondary voltage, and the flue gas temperature prior to the ESP housing indicator ranges.

Stack opacity is measured and recorded by the certified continuous opacity monitoring (COM) system. The visible particulate emissions indicator range is each six-minute block

average with an opacity value greater than 10%. When the opacity value is greater than 10%, corrective action (including, but not limited to, an evaluation of the emissions unit and electrostatic precipitator) will be required.

The electrostatic precipitator may be evaluated by checking the secondary voltage and Flue gas temperature prior to the ESP housing to ensure that they are operating within the indicator ranges below. The electrostatic precipitator power parameter indicator ranges for normal operation are:

<u>Parameter</u>	<u>Indicator Range</u>
Secondary Voltage	≥ 40 kilovolts
Flue gas temperature prior to the ESP housing	≥ 342 °F

When the opacity exceeds 10% for more than six consecutive minutes and the hourly average of one of the above parameters is outside of the indicator ranges above, additional corrective action focused on the ESP will be required. When opacity exceeds 10% for more than six consecutive minutes and the hourly averages for the power and temperature parameters are within the indicator ranges above, corrective action focused on the emission unit will be required.

Upon detecting an excursion of the visible particulate emission value above 10% opacity, the owner or operator shall restore operation of the emissions unit (including the control device) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

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

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

- (10) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:



Table with 2 columns: ID (e.g., 63.11205(b)) and Description (e.g., demonstrating compliance with Hg emission limit)

(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 #P0108859, issued on 12/15/2011:d)(1) through d)(10).

[OAC rule 3745-77-07(A)(3)(a)(ii)]

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:
- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance.
  - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
    - i. the facility name and address;
    - ii. the manufacturer and model number of the continuous opacity monitor;
    - iii. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
    - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
    - v. the total operating time (hours) of the emissions unit;
    - vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
    - vii. the date, time, and duration of any/each malfunction\*\* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
    - viii. the date, time, and duration of any downtime\*\* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation;
    - ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii); and
    - x. identification of all periods during which coal was fired in this emissions unit.
  - c. If only natural gas was burned in this emissions unit during a calendar quarter, then the permittee may submit a quarterly report with a statement to that effect in lieu of the information specified in e)(2)a. and b. for that calendar quarter.

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

[40 CFR 60.7]

- (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 30, April 30, July 30, and October 30 of each year, and shall cover the data obtained during the previous calendar quarters.

[OAC rule 3745-18-04(D)] and [OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

all exceedances of the rolling, 12-month limitation of the coal usage rate for emissions units B001, B002, B003, and B004 combined.

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

[OAC rule 3745-77-07(C)(1)]

- (5) If the results of CAM monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded when burning coal, the permittee shall submit the results of that data, and document any corrective action taken to restore



operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

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

- (6) The permittee shall submit reports and such other notifications to the Toledo Division of Environmental Services as are required pursuant to 40 CFR Part 63, Subpart JJJJJJ, per the following sections:

Table with 2 columns: Regulatory Reference and Description. Rows include 63.11214(c), 63.11214(d), 63.11222(b), 63.11225(a), 63.11225(b), 63.11225(e), 63.11225(g), and 63.11226(a), (b).

- (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 #P0108859, issued on 12/15/2011: e)(1) through 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.

[OAC rule 3745-77-07(A)(3)(a)(ii)]

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 opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

[OAC rule 3745-17-03(B)(1)(a)]

b. Emission Limitation:

PE shall not exceed 0.14 pound per million Btu of actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-17-03(B)(9)]

c. Emission Limitation:

PE shall not exceed 0.020 pound per million Btu of actual heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-17-03(B)(9)]

d. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 1.5 pounds of SO<sub>2</sub> per million Btu actual heat input.

Applicable Compliance Method:

The records required by d)(5) thru d)(7) shall be used to demonstrate compliance with this emission limitation.

If required, the permittee shall also demonstrate compliance according to the method(s) and procedures specified in OAC rule 3745-18-04(D).

[OAC rule 3745-18-04(D)]



e. Emission Limitation:

Mercury (Hg) emissions when burning coal shall not exceed 0.0000048 pound per million Btu of heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the applicable methods and procedures specified in 40 CFR 63.11210(a), 63.11211, 63.11212, 63.11213, and 63.11220. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

[40 CFR Part 63, Subpart JJJJJJ]

f. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 400 parts per million by volume on a dry basis corrected to 3 percent oxygen.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the applicable methods and procedures specified in 40 CFR 63.11210(a), 63.11211, 63.11212, and 63.11220. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

[40 CFR Part 63, Subpart JJJJJJ]

(2) The permittee shall comply with the applicable testing required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:

63.11210(b)	demonstrate initial compliance with CO and Hg limits by no later than September 17, 2014
63.11210(c)	demonstrate initial compliance with work practice standards in Table 2 by no later than March 21, 2014
63.11211(a)	initial compliance requirements
63.11211(c)	mercury fuel analyses compliance option
63.11212(a)	stack test and site-specific test plan requirements
63.11212(b)	conduct stack tests according to Table 4
63.11212(c)	load and fuel requirements during testing
63.11212(d)	number of runs for each performance test
63.11212(e)	determining compliance using F-Factor methodology



Table with 2 columns: ID and Description. Rows include fuel analyses requirements, fuel composite samples, determining mercury concentration, triennial stack testing requirements, alternate mercury performance test frequency, and CO test frequency.

- (3) 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 6 months prior to permit expiration.
b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates, opacity, and sulfur dioxide when burning coal as fuel.
c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
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...

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)]

g) **Miscellaneous Requirements**

- (1) The electrostatic precipitator stack may be by-passed when combusting solely natural gas and compliance with the particulate emission limitation is maintained.

[OAC rule 3745-77-07(C)(1)]



2. B004, Boiler No. 4

Operations, Property and/or Equipment Description:

Keeler 93.3 mmBtu/hr coal fired boiler with electrostatic precipitator

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 04-079 issued 7/16/1976)	See b)(2)a.
b.	OAC rule 3745-31-05(D) (PTI P0108859 issued 12/6/2011)  Synthetic minor restrictions for purposes of avoiding 40 CFR Part 63, Subpart DDDDD	See b)(2)e., and Sections B.3, B.4, and B.5.
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-10(C)(1)	PE shall not exceed 0.14 pound per million Btu of actual heat input.
e.	OAC rule 3745-18-54(A)	Sulfur dioxide (SO2) emissions shall not exceed 1.6 pounds of sulfur dioxide per million Btu actual heat input.
f.	OAC rule 3745-110-03	exempt – see b)(2)f.
g.	40 CFR Part 63, Subpart JJJJJJ (40 CFR 63.11193 – 63.11237)  [In accordance with 40 CFR 63.11201(a) and Table 1 to Subpart JJJJJJ, this emissions unit is an existing affected boiler with a maximum heat input of greater than 10 mmBtu/hr that is capable of	Mercury (Hg) emissions when burning coal shall not exceed 0.0000048 pound per million Btu of heat input.  Carbon monoxide (CO) emissions shall not exceed 400 parts per million by volume on a dry basis corrected to 3 percent oxygen.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	burning coal or natural gas as fuel subject to the emissions limitations/control measures specified in this section.]	See b)(2)d.
h.	40 CFR 63.1 – 16 (40 CFR 63.11235)	Table 8 to Subpart JJJJJJ of 40 CFR Part 63 – Applicability of General Provisions to Subpart JJJJJJ shows which parts of the General Provisions in 40 CFR Part 63.1-16 apply.
i.	40 CFR Part 64 (40 CFR 64.1 – 64.10)  [In accordance with 40 CFR 64.2(a), this emissions unit uses a control device to achieve compliance with the applicable PE limitation, and pre-control PE are greater than 100 tons per year and subject to the requirements of this rule.]	See d)(1), d)(2), d)(6), d)(7), and e)(2)

(2) Additional Terms and Conditions

- a. PTI 04-079 did not establish an emission limitation under this rule.
- b. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60, Appendix B, Performance Specification 1. The plan shall include, at a minimum, procedures for conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring accurate operation of the continuous opacity monitoring system on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

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

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix B to 40 CFR Part 60]



d. The permittee shall comply with the emission limits and energy assessment requirements specified by this rule no later than March 21, 2014.

[40 CFR 63.11196(a)(2), (3)]

e. The maximum annual coal usage rate for emissions units B001, B002, B003, and B004 combined shall not exceed 16,500 tons per year, based upon a rolling, 12-month summation of the coal usage rates.

f. The NOx RACT requirements of OAC rule 3745-110-03 do not apply to this emissions unit, since this existing source is not located in a county listed in OAC rule 3745-110-02(A)(1)(b).

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.

[OAC rule 3745-18-04(D)] and [OAC rule 3745-77-07(A)(1)]

(2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:

Table with 2 columns: Reference (e.g., 63.11201(b)) and Description (e.g., per Table 2, minimize startup and shutdown periods and conduct one-time energy assessment)

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.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (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, but not limited to:

- a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;
- b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;
- d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;
- e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; as well as,
- f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (3) The permittee shall collect a representative sample of each shipment of coal which is received for burning with a minimum of 1 sample per truck load or railcar load. 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.

[OAC rule 3745-18-04(D)(3)(b)] and [OAC rule 3745-77-07(C)(1)]

- (4) 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.

[OAC rule 3745-18-04(D)] and [OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall calculate and record the average monthly sulfur dioxide emission rate for each monthly composite fuel sample analyzed under d)(3) as follows:

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

where: ER = the emission rate in pounds of sulfur dioxide per MMBtu;

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

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

[OAC rule 3745-18-04(F)(1)] and [OAC rule 3745-77-07(C)(1)]

- (6) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions are the opacity of the visible particulate emissions from the electrostatic precipitator exhaust stack, the electrostatic precipitator secondary voltage, and the flue gas temperature prior to the ESP housing indicator ranges.

Stack opacity is measured and recorded by the certified continuous opacity monitoring (COM) system. The visible particulate emissions indicator range is each six-minute block average with an opacity value greater than 10%. When the opacity value is greater than 10%, corrective action (including, but not limited to, an evaluation of the emissions unit and electrostatic precipitator) will be required.

The electrostatic precipitator may be evaluated by checking the secondary voltage and Flue gas temperature prior to the ESP housing to ensure that they are operating within the indicator ranges below. The electrostatic precipitator power parameter indicator ranges for normal operation are:

<u>Parameter</u>	<u>Indicator Range</u>
Secondary Voltage	≥ 40 kilovolts
Flue gas temperature prior to the ESP housing	≥ 342 °F

When the opacity exceeds 10% for more than six consecutive minutes and the hourly average of one of the above parameters is outside of the indicator ranges above, additional corrective action focused on the ESP will be required. When opacity exceeds

10% for more than six consecutive minutes and the hourly averages for the power and temperature parameters are within the indicator ranges above, corrective action focused on the emission unit will be required.

Upon detecting an excursion of the visible particulate emission value above 10% opacity, the owner or operator shall restore operation of the emissions unit (including the control device) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

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

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

- (7) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

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

- (8) The permittee shall maintain monthly records of the following information:
- a. the coal usage rate, in tons, for this emissions unit; and
  - b. the rolling, 12-month summation of the coal usage rates, in tons, for emissions units B001, B002, B003, and B004 combined.

[OAC rule 3745-77-07(C)(1)]

- (9) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:



Table with 2 columns: ID (e.g., 63.11205(b)) and Description (e.g., demonstrating compliance with Hg emission limit)

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-77-07(C)(1)]

(2) 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.

applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance.

- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
- i. the facility name and address;
  - ii. the manufacturer and model number of the continuous opacity monitor;
  - iii. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
  - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
  - v. the total operating time (hours) of the emissions unit;
  - vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
  - vii. the date, time, and duration of any/each malfunction\*\* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
  - viii. the date, time, and duration of any downtime\*\* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
  - ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

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

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

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

[40 CFR 60.7]

- (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 30, April 30, July 30, and October 30 of each year, and shall cover the data obtained during the previous calendar quarters.

[OAC rule 3745-18-04(D)] and [OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

all exceedances of the rolling, 12-month limitation of the coal usage rate for emissions units B001, B002, B003, and B004 combined.

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

[OAC rule 3745-77-07(C)(1)]

- (5) If the results of CAM monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

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

- (6) The permittee shall submit reports and such other notifications to the Toledo Division of Environmental Services as are required pursuant to 40 CFR Part 63, Subpart JJJJJJ, per the following sections:



Table with 2 columns: Regulatory Code and Description. Rows include codes like 63.11214(c), 63.11222(b), 63.11225(a) and descriptions such as 'include energy assessment certification with Notification of Compliance Status report'.

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 opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

[OAC rule 3745-17-03(B)(1)(a)]

b. Emission Limitation:

PE shall not exceed 0.14 pound per million Btu of actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-17-03(B)(9)]

c. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 1.6 pounds of SO<sub>2</sub> per million Btu actual heat input.

Applicable Compliance Method:

The records required by d)(3) thru d)(5) shall be used to demonstrate compliance with this emission limitation.

If required, the permittee shall also demonstrate compliance according to the method(s) and procedures specified in OAC rule 3745-18-04(D).

[OAC rule 3745-18-04(d)]

d. Emission Limitation:

Mercury (Hg) emissions when burning coal shall not exceed 0.0000048 pound per million Btu of heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the applicable methods and procedures specified in 40 CFR 63.11210(a), 63.11211, 63.11212, 63.11213, and 63.11220. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

[40 CFR Part 63, Subpart JJJJJJ]

e. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 400 parts per million by volume on a dry basis corrected to 3 percent oxygen.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the applicable methods and procedures specified in 40 CFR 63.11210(a), 63.11211, 63.11212, and 63.11220. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

[40 CFR Part 63, Subpart JJJJJJ]

- (2) The permittee shall comply with the applicable testing requirements required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:

63.11210(b)	demonstrate initial compliance with CO and Hg limits by no later than September 17, 2014
63.11210(c)	demonstrate initial compliance with work practice standards in Table 2 by no later than March 21, 2014
63.11211(a)	initial compliance requirements
63.11211(c)	mercury fuel analyses compliance option
63.11212(a)	stack test and site-specific test plan requirements
63.11212(b)	conduct stack tests according to Table 4
63.11212(c)	load and fuel requirements during testing
63.11212(d)	number of runs for each performance test
63.11212(e)	determining compliance using F-Factor methodology
63.11213(a)	fuel analyses requirements
63.11213(b)	fuel composite samples
63.11213(c)	determining mercury concentration
63.11220(a)	triennial stack testing requirements
63.11220(b), (c)	alternate mercury performance test frequency
63.11220(d)	CO test frequency

- (3) 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 6 months prior to permit expiration. *Note that additional emission testing requirements under 40 CFR Part 63, Subpart JJJJJJ apply, and these requirements are summarized in f(2).*
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates, opacity, and sulfur dioxide.

If the boiler is non-operational within 6 months prior to permit expiration, it is not necessary to start up the boiler solely to conduct the performance test. The performance test of the non-operational boiler can be conducted when the boiler is started up again.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
- for particulates, the methods and procedures specified under OAC rule 3745-17-03(B)(9);
- for opacity, Method 9 of 40 CFR Part 60, Appendix A; and
- for SO<sub>2</sub>, the methods and procedures specified under OAC rule 3745-18-04(D)(1).
- Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- 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)]

- g) Miscellaneous Requirements
  - (1) None.



**3. Emissions Unit Group -B001,B002: B001,B002**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
B001	Wickes 53.3 mmBtu/hr coal fired boiler with electrostatic precipitator
B002	Wickes 93.3 mmBtu/hr coal fired boiler with electrostatic precipitator

- 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(D) (PTI P0108859 issued 12/15/2011)  Synthetic minor restrictions for purposes of avoiding 40 CFR Part 63, Subpart DDDDD	See b)(2)d. and Sections B.3, B.4, and B.5.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(C)(1)	PE shall not exceed 0.14 pound per million Btu of actual heat input.
d.	OAC rule 3745-18-54(P)	Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 1.5 pounds of sulfur dioxide per million Btu actual heat input.
e.	OAC rule 3745-110-03	exempt – see b)(2)e.
f.	40 CFR Part 63, Subpart JJJJJJ (40 CFR 63.11193 – 63.11237)  [In accordance with 40 CFR 63.11201(a) and Table 1 to Subpart JJJJJJ, this emissions unit is an existing affected boiler with a maximum heat input of greater than 10 mmBtu/hr that is capable of burning coal or natural gas as fuel	Mercury (Hg) emissions when burning coal shall not exceed 0.000048 pound per million Btu of heat input.  Carbon monoxide (CO) emissions shall not exceed 400 parts per million by volume on a dry basis corrected to 3 percent oxygen.  See b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	subject to the emissions limitations/control measures specified in this section.]	
g.	40 CFR 63.1 – 16 (40 CFR 63.11235)	Table 8 to Subpart JJJJJJ of 40 CFR Part 63 – Applicability of General Provisions to Subpart JJJJJJ shows which parts of the General Provisions in 40 CFR Part 63.1-16 apply.
h.	40 CFR Part 64 (40 CFR 64.1 – 64.10)  [In accordance with 40 CFR 64.2(a), this emissions unit uses a control device to achieve compliance with the applicable PE limitation, and pre-control PE are greater than 100 tons per year and subject to the requirements of this rule.]	See d)(1), d)(2), d)(6), d)(7), and e)(2)

(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.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

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

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix B to 40 CFR Part 60]

c. The permittee shall comply with the emission limits and energy assessment requirements specified by this rule no later than March 21, 2014.

[40 CFR 63.11196(a)(2), (3)]

**Draft Title V Permit**

University of Toledo Health Science Campus

**Permit Number:** P0088114

**Facility ID:** 0448010247

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

- d. The maximum annual coal usage rate for emissions units B001, B002, B003, and B004 combined shall not exceed 16,500 tons per year, based upon a rolling, 12-month summation of the coal usage rates.

Emissions units B001, B002, B003, and B004 have been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the coal usage rate, upon issuance of this permit.

- e. The NOx RACT requirements of OAC rule 3745-110-03 do not apply to this emissions unit, since this existing source is not located in a county listed in OAC rule 3745-110-02(A)(1)(b).

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.

[OAC rule 3745-18-04(D)] and [OAC rule 3745-77-07(A)(1)]

- (2) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:

63.11201(b)	per Table 2, minimize startup and shutdown periods and conduct one-time energy assessment
63.11201(c)	comply with each operating limit in Table 3
63.11205(a)	operation and maintenance procedures for minimizing emissions
63.11211(b)	establish parameter operating limits
63.11214(d), 63.11223(c)	minimizing startup and shutdown periods

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.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (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, but not limited to:

- a. percent opacity on an instantaneous (one-minute) and 6-minute block average basis;
- b. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- c. hours of operation of the emissions unit, continuous opacity monitoring system, and control equipment;
- d. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous opacity monitoring system;
- e. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous opacity monitoring system; as well as,
- f. the reason (if known) and the corrective actions taken (if any) for each such event in (d) and (e).

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- (3) The permittee shall collect a representative sample of each shipment of coal which is received for burning with a minimum of 1 sample per truck load or railcar load. 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.

[OAC rule 3745-18-04(D)(3)(b)] and [OAC rule 3745-77-07(C)(1)]

- (4) 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.

[OAC rule 3745-18-04(D)] and [OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall calculate and record the average monthly sulfur dioxide emission rate for each monthly composite fuel sample analyzed under d)(3) as follows:

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

where: ER = the emission rate in pounds of sulfur dioxide per MMBtu;

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

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

[OAC rule 3745-18-04(F)(1)] and [OAC rule 3745-77-07(C)(1)]

- (6) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions are the opacity of the visible particulate emissions from the electrostatic precipitator exhaust stack, the electrostatic precipitator secondary voltage, and the flue gas temperature prior to the ESP housing indicator ranges.

Stack opacity is measured and recorded by the certified continuous opacity monitoring (COM) system. The visible particulate emissions indicator range is each six-minute block average with an opacity value greater than 10%. When the opacity value is greater than 10%, corrective action (including, but not limited to, an evaluation of the emissions unit and electrostatic precipitator) will be required.

The electrostatic precipitator may be evaluated by checking the secondary voltage and Flue gas temperature prior to the ESP housing to ensure that they are operating within the indicator ranges below. The electrostatic precipitator power parameter indicator ranges for normal operation are:

<u>Parameter</u>	<u>Indicator Range</u>
Secondary Voltage	≥ 40 kilovolts
Flue gas temperature prior to the ESP housing	≥ 342 °F

When the opacity exceeds 10% for more than six consecutive minutes and the hourly average of one of the above parameters is outside of the indicator ranges above, additional corrective action focused on the ESP will be required. When opacity exceeds

10% for more than six consecutive minutes and the hourly averages for the power and temperature parameters are within the indicator ranges above, corrective action focused on the emission unit will be required.

Upon detecting an excursion of the visible particulate emission value above 10% opacity, the owner or operator shall restore operation of the emissions unit (including the control device) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

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

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

- (7) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

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

- (8) The permittee shall maintain monthly records of the following information:
- a. the coal usage rate, in tons, for this emissions unit; and
  - b. the rolling, 12-month summation of the coal usage rates, in tons, for emissions units B001, B002, B003, and B004 combined.

[OAC rule 3745-77-07(C)(1)]

- (9) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:

63.11205(b)	demonstrating compliance with Hg emission limit
63.11205(c)	site-specific monitoring plan
63.11220(e)	monthly mercury fuel analysis requirements
63.11221(b)	monitoring system and data collection requirements
63.11221(c)	monitoring system malfunction or out-of-control periods
63.11221(d)	monitoring requirement deviations
63.11222(a)	demonstrating continuous compliance with emission limits and operating limits
63.11224(a)	continuous oxygen monitor requirements
63.11224(b)	maintaining operating limits
63.11224(c)	site-specific monitoring plan
63.11224(d)	continuous parameter monitoring system requirements
63.11224(e)	continuous opacity monitoring system requirements
63.11225(c)	record keeping requirements
63.11225(d)	form of records and record retention requirements

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous opacity monitoring system:

- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the

applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance.

- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
- i. the facility name and address;
  - ii. the manufacturer and model number of the continuous opacity monitor;
  - iii. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
  - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
  - v. the total operating time (hours) of the emissions unit;
  - vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;
  - vii. the date, time, and duration of any/each malfunction\*\* of the continuous opacity monitoring system, emissions unit, and/or control equipment;
  - viii. the date, time, and duration of any downtime\*\* of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
  - ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

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

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

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

[40 CFR 60.7]

- (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 30, April 30, July 30, and October 30 of each year, and shall cover the data obtained during the previous calendar quarters.

[OAC rule 3745-18-04(D)] and [OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

all exceedances of the rolling, 12-month limitation of the coal usage rate for emissions units B001, B002, B003, and B004 combined.

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

[OAC rule 3745-77-07(C)(1)]

- (5) If the results of CAM monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

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

- (6) The permittee shall submit reports and such other notifications to the Toledo Division of Environmental Services as are required pursuant to 40 CFR Part 63, Subpart JJJJJJ, per the following sections:

63.11214(c)	include energy assessment certification with Notification of Compliance Status report
63.11214(d), 63.11223(c)	include signed statement in Notification of Compliance Status report regarding startups and shutdowns
63.11222(b)	report emission standard and operating limit deviations according to 63.11225
63.11225(a)	notification requirements
63.11225(b)	annual compliance certification report
63.11225(e)	relative accuracy test audit and performance test report submittal requirements
63.11225(g)	reporting fuel switch
63.11226(a), (b)	reporting exceedance of emission limit(s) during a malfunction and asserting an affirmative defense

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 opacity as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

[OAC rule 3745-17-03(B)(1)(a)]

b. Emission Limitation:

PE shall not exceed 0.14 pound per million Btu of actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the methods and procedures specified in OAC rule 3745-17-03(B)(9).

[OAC rule 3745-17-03(B)(9)]

c. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 1.5 pounds of SO<sub>2</sub> per million Btu actual heat input.

Applicable Compliance Method:

The records required by d)(3) thru d)(5) shall be used to demonstrate compliance with this emission limitation.

If required, the permittee shall also demonstrate compliance according to the method(s) and procedures specified in OAC rule 3745-18-04(D).

[OAC rule 3745-18-04(D)]

d. Emission Limitation:

Mercury (Hg) emissions when burning coal shall not exceed 0.0000048 pound per million Btu of heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the applicable methods and procedures specified in 40 CFR 63.11210(a), 63.11211, 63.11212, 63.11213, and 63.11220. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

[40 CFR Part 63, Subpart JJJJJJ]

e. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 400 parts per million by volume on a dry basis corrected to 3 percent oxygen.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance using the applicable methods and procedures specified in 40 CFR 63.11210(a), 63.11211, 63.11212, and 63.11220. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

[40 CFR Part 63, Subpart JJJJJJ]

- (2) The permittee shall comply with the applicable testing requirements required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:

63.11210(b)	demonstrate initial compliance with CO and Hg limits by no later than September 17, 2014
63.11210(c)	demonstrate initial compliance with work practice standards in Table 2 by no later than March 21, 2014
63.11211(a)	initial compliance requirements
63.11211(c)	mercury fuel analyses compliance option
63.11212(a)	stack test and site-specific test plan requirements
63.11212(b)	conduct stack tests according to Table 4
63.11212(c)	load and fuel requirements during testing
63.11212(d)	number of runs for each performance test
63.11212(e)	determining compliance using F-Factor methodology
63.11213(a)	fuel analyses requirements
63.11213(b)	fuel composite samples
63.11213(c)	determining mercury concentration
63.11220(a)	triennial stack testing requirements
63.11220(b), (c)	alternate mercury performance test frequency
63.11220(d)	CO test frequency

- (3) 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 6 months prior to permit expiration. *Note that additional emission testing requirements under 40 CFR Part 63, Subpart JJJJJJ apply, and these requirements are summarized in f(2).*
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates, opacity, and sulfur dioxide.

If the boiler is non-operational within 6 months prior to permit expiration, it is not necessary to start up the boiler solely to conduct the performance test. The performance test of the non-operational boiler can be conducted when the boiler is started up again.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):
- for particulates, the methods and procedures specified under OAC rule 3745-17-03(B)(9);
- for opacity, Method 9 of 40 CFR Part 60, Appendix A; and
- for SO<sub>2</sub>, the methods and procedures specified under OAC rule 3745-18-04(D)(1).
- Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- 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)]

- g) Miscellaneous Requirements
  - (1) None.

**4. Emissions Unit Group -B008 - B011, and B013: B008,B009,B010,B011,B013,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
B008	FSB Steam Generator No. 1: 25.8 million BTU/hr natural gas/No. 2 fuel oil fired boiler
B009	FSB Steam Generator No. 2: 25.8 million BTU/hr natural gas/No. 2 fuel oil fired boiler
B010	FSB Steam Generator No. 3: 25.8 million BTU/hr natural gas/No. 2 fuel oil fired boiler
B011	FSB Steam Generator No. 4: 25.8 million BTU/hr natural gas/No. 2 fuel oil fired boiler
B013	FSB Steam Generator No. 5: 25.8 million BTU/hr natural gas/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), as effective 11/30/2001 (PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 12/20/2012)	<p>The emissions of carbon monoxide (CO) shall not exceed 0.082 lb/mmBtu when combusting natural gas; 0.040 lb/mmBtu when combusting distillate fuel oil; and 9.27 tons per year.</p> <p>Particulate emissions (PE) shall not exceed 0.0075 lb/mmBtu when combusting natural gas; 0.014 lb/mmBtu when combusting distillate fuel oil; and 1.21 tons per year.</p> <p>The emissions of organic compounds (OC) shall not exceed 0.011 lb/mmBtu when combusting natural gas; 0.004 lb/mmBtu when combusting distillate fuel oil; and 1.24 tons per year.</p> <p>The emissions of sulfur dioxide (SO<sub>2</sub>) shall not exceed 0.001 lb/mmBtu when combusting natural gas; 0.05 lb/mmBtu when combusting distillate fuel oil; and 2.86 tons per year.</p> <p>See b)(2)a., b)(2)b. and b)(2)e.</p>

**Draft Title V Permit**

University of Toledo Health Science Campus

**Permit Number:** P0088114**Facility ID:** 0448010247**Effective Date:** To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	ORC 3704.03(T) (PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 12/20/2012)	The emissions of nitrogen oxides (NOx) shall not exceed 0.080 lb/mmBtu when combusting natural gas; 0.190 lb/mmBtu when combusting distillate fuel oil.  See b)(2)a.
c.	OAC rule 3745-31-05(D) (PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 1/20/2012)	The combined emissions of carbon monoxide (CO) from emissions units B008 through B011 and B013 shall not exceed 31.51 tons per rolling, 12-month period;  The combined emissions of nitrogen oxides (NOx) from emissions units B008 through B011 and B013 shall not exceed 39.20 tons per rolling, 12-month period;  The combined particulate emissions (PE) from emissions units B008 through B011 and B013 shall not exceed 3.46 tons per rolling, 12-month period;  The combined emissions of sulfur dioxide (SO2) from emissions units B008 through B011 and B013 shall not exceed 3.16 tons per rolling, 12-month period; and  The combined emissions of organic compounds (OC) from emissions units B008 through B011 and B013 shall not exceed 4.15 tons per rolling, 12-month period.  The emissions of sulfur dioxide (SO2) shall not exceed 0.05 lb/mmBtu when combusting distillate fuel oil.  See c)(1) and c)(2)
d.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 (PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 1/20/2012)	See b)(2)f.
e.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack serving this emissions unit shall not

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		exceed 20% opacity, as a six-minute average, except as provided by rule.
f.	OAC rule 3745-17-10(B)(1)	PE shall not exceed 0.020 pound per million Btu of actual heat input when burning natural gas and/or number two fuel oil.
g.	OAC rule 3745-18-06(D)	Exempt, by the provisions of OAC rule 3745-18-06(A) during any calendar day in which natural gas is the only fuel burned.  See b)(2)c.
h.	40 CFR Part 60, Subpart Dc	See b)(2)c. and b)(2)d.
i.	40 CFR Part 60, Subpart A	See b)(2)d.
j.	40 CFR Part 63, Subpart A	Table 8 to Subpart JJJJJJ of 40 CFR Part 63 – Applicability of General Provisions to Subpart JJJJJJ shows which parts of the General Provisions in 40 CFR 63.1 – 16 apply.
k.	40 CFR Part 63, Subpart JJJJJJ  [In accordance with 40 CFR 63.11237 this emissions unit is a new gas-fired boiler that also has the capability to operate as an “oil subcategory” boiler located at an area source of HAP emissions subject to the emissions limitations/control measures specified in this section.]	When this emissions unit is operated as a gas-fired boiler as defined under 40 CFR 63.11237, then it is not subject 40 CFR Part 63, Subpart JJJJJJ and to any requirements of 40 CFR Part 63, Subpart JJJJJJ, and to any term and condition in this permit referencing 40 CFR Part 63, Subpart JJJJJJ.  PE shall not exceed 0.03 pound per million Btu of heat input when this emissions unit is operated as an “oil subcategory” boiler as defined under 40 CFR 63.11237.  see b)(2)h.

(2) Additional Terms and Conditions

- a. The lb/mmBtu actual heat input emission limitations were established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop recordkeeping and/or reporting requirements to ensure compliance with these limitations.
- b. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Dc, OAC rule 3745-17-07(A)(1), OAC rule 3745-17-10(B)(1), and 40 CFR Part 63, Subpart JJJJJJ.

- c. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
- d. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- e. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply:  
  
b)(1)a., b)(2)e., f)(1)j., k., l., n., o., p., r., s., and t.
- f. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.  
  
The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled carbon monoxide (CO) emissions, particulate emissions (PE), organic compound (OC), and sulfur dioxide (SO<sub>2</sub>) emissions from this air contaminant source since the uncontrolled potential to emit for CO, PE, OC, and SO<sub>2</sub> is less than 10 tons per year.
- g. This subpart provides applicability provisions, definitions, and other general provisions that are applicable to emissions units affected by 40 CFR Part 60.
- h. As specified in 40 CFR 63.11201(b), the permittee shall comply with the following applicable work practice standards, emission reduction measures and management practices.
  - i. The permittee shall minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.
  - ii. The permittee shall conduct a tune-up of the boiler biennially as specified in 40 CFR 63.11223.

c) Operational Restrictions

- (1) The permittee shall only burn natural gas or distillate fuel oil with  $\leq 0.05\%$  sulfur by weight in this emissions unit, or the quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in this permit (0.05 pound SO<sub>2</sub> per million Btu of heat input).

[PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 1/20/2012]

- (2) To ensure enforceability during the first 12 calendar months of operation, the permittee shall not exceed the group's total usage rates (on an as received basis) specified in the following table for B008 through B011 and B013 combined:

Month(s)	Maximum Allowable Cumulative Fuel Usage	
	Natural Gas Usage Rate (mscf)	Fuel Oil Usage Rate (gallons)
1	78,000	90,000
1 - 2	156,000	180,000
1 - 3	234,000	270,000
1 - 4	312,000	360,000
1 - 5	390,000	450,000
1 - 6	468,000	540,000
1 - 7	546,000	630,000
1 - 8	624,000	720,000
1 - 9	700,000	800,000
1 - 10	700,000	800,000
1 - 11	700,000	800,000
1 - 12	700,000	800,000

After the first 12 calendar months of operation, compliance with the group's total fuel usage limitation(s) for B008 through B011 and B013 combined shall be based upon a rolling, 12-month summation of the monthly quantities of fuel(s) received.

[PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 1/20/2012]

- (3) The permittee shall comply with the applicable restrictions required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:

63.11201(b)	per Table 2, minimize startup and shutdown periods and conduct one-time energy assessment
63.11201(c)	per Table 3, maintain the operating load of each unit such that it does not exceed 110 percent of the average operating load recorded during the most recent performance stack test
63.11205(a)	operation and maintenance procedures for minimizing emissions
63.11214(d), 63.11223(c)	minimizing startup and shutdown periods

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas or distillate fuel oil with  $\leq 0.05\%$  sulfur by weight, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 1/20/2012]

- (2) For each shipment of oil received for burning at this facility, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in pounds per million Btu). The sulfur dioxide emission rate shall be calculated in accordance with the formula(s) specified in OAC rule 3745-18-04(F) and 40 CFR 60.44c. 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.

[PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 1/20/2012]

- (3) The permittee shall maintain monthly records of the following information:
- a. the total natural gas usage rate (in mscf) for each month for B008, B009, B010, B011 and B013 combined; and

- b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the group total natural gas usage rates (in mscf) for B008, B009, B010, B011 and B013 combined.
- c. the group total distillate fuel oil usage rate (in gallons, on an as received basis) for each month for B008, B009, B010, B011 and B013 combined; and
- d. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the total distillate fuel oil usage rates (in gallons) for B008, B009, B010, B011 and B013 combined.
- e. During the first 12 calendar months of operation following the issuance of this permit, the permittee shall record:
  - i. the cumulative total distillate fuel usage rate(s) for each calendar month (on an as received basis) for B008, B009, B010, B011 and B013 combined.
  - ii. the cumulative total natural gas usage rate(s) for each calendar month on an as-received basis for B008, B009, B010, B011, and B013 combined.

[PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 1/20/2012]

- (4) The permittee shall comply with the applicable monitoring and record keeping requirements required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:

63.11221(b)	monitoring system and data collection requirements for operating load
63.11221(c)	monitoring system malfunction or out-of-control periods for operating load
63.11221(d)	monitoring requirement deviations for operating load
63.11222(a)	demonstrating continuous compliance with emission limits and operating limits; continuously monitor the operating load; operation with operating load > 110% of that during most recent stack test constitutes a deviation; keep records of types and amounts of all fuels burned
63.11223(a), 63.11223(b)	biennial performance tune-up
63.11224(c)	site-specific monitoring plan for operating load
63.11224(d)	continuous monitoring system for operating load
63.11225(c)	record keeping requirements
63.11225(d)	form of records and record retention requirements

- (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 P0108910 issued on 12/15/2011 and P0108861 issued on 1/20/2012:d)(1) through 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.

[OAC rule 3745-77-07(A)(3)(a)(ii)]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or distillate fuel oil with  $\leq 0.05\%$  sulfur by weight was burned in this emissions unit. Each report shall be submitted electronically through Ohio EPA Air Services within 30 days after the deviation occurs.

[PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 1/20/2012]

- (2) The permittee shall notify the director (the Toledo Division of Environmental Services) 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 calculated in accordance with the formula(s) specified in OAC rule 3745-18-04(F) and 40 CFR 60.44c. The notification shall include a copy of such record and shall be submitted electronically through Ohio EPA Air Services within 45 days after the deviation occurs.

[PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 1/20/2012]

- (3) The permittee shall submit quarterly deviation (excursion) reports summarizing the content of the deviation reports above, and that identify all exceedances of the rolling, 12-month total fuel usage limitation(s) and, for the first 12 calendar months of operation, all exceedances of the maximum allowable cumulative total fuel usage limitations for B008, B009, B010, B011 and B013 combined.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a quarterly report that states no deviations (excursions) occurred during the calendar quarter.

The quarterly reports shall be submitted electronically through Ohio EPA Air Services each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

[PTI P0108910 issued 11/23/2011 and PTI P0108861 issued 1/20/2012]

- (4) The permittee shall submit reports and such other notifications to the Toledo Division of Environmental Services as are required pursuant to 40 CFR Part 63, Subpart JJJJJJ, per the following sections:

63.11214(b)	include signed statement in Notification of Compliance Status that a tune-up of the boiler was conducted
63.11214(d), 63.11223(c)	include signed statement in Notification of Compliance Status report regarding startups and shutdowns
63.11222(b)	report emission standard and operating limit deviations according to 63.11225
63.11225(a)	notification requirements
63.11225(b)	annual compliance certification report
63.11225(e)	performance test report submittal requirements
63.11225(g)	reporting fuel switch
63.11226(a), (b)	reporting exceedance of emission limit(s) during a malfunction and asserting an affirmative defense

- (5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

[OAC rule 3745-77-07(C)(1)]

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 serving this emissions unit shall not exceed 20% 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).

[OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.080 pound NO<sub>x</sub> per mmBtu of heat input when combusting gas

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit using flue gas recirculation based upon manufacturer's emissions factors.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and Method 7 of 40 CFR, Part 60 Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

0.190 pound NO<sub>x</sub> per mmBtu of heat input when combusting fuel oil

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit based upon manufacturer's emissions factors.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and Method 7 of 40 CFR, Part 60 Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

The combined emissions of NO<sub>x</sub> from emissions units B008 through B011 and B013 shall not exceed 39.20 tons per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for five emissions units utilizing the allowable quantity of fuel oil (800,000 gallons per year) and the allowable quantity of natural gas (700,000 mscf per year). At 140 mmBtu per 1000 gallons, fuel oil usage accounts for 112,000 mmBtu of heat input per year. At 1,020 Btu per scf, natural gas oil usage accounts for 714,000 mmBtu of heat input per year.

The annual emissions of NO<sub>x</sub> may be calculated as the sum of the emissions from fuel oil combustion added to the emissions from natural gas combustion. Fuel oil emissions may be calculated by multiplying the technical emissions limitation (0.190 pound of NO<sub>x</sub> per mmBtu of heat input) by the distillate fuel oil heat input (112,000 million Btu per year) and dividing by 2000 pounds per ton. Natural gas emissions may be calculated by multiplying the technical emissions limitation (0.080 pound of NO<sub>x</sub> per mmBtu of heat input) by the natural gas heat input (714,000 million Btu per year) and dividing by 2000 pounds per ton.

$(0.190 \text{ lb/mmBtu})(112,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 10.64 \text{ tpy}$

$(0.080 \text{ lb/mmBtu})(714,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 28.56 \text{ tpy}$

[OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

0.05 pound of SO<sub>2</sub> per mmBtu when combusting fuel oil

Applicable Compliance Method:

Compliance with the allowable sulfur dioxide emission limitation may be demonstrated by using the AP-42 emission factor from "Compilation of Air Pollutant Emission Factors", 5th Edition (5/10), Section 1.3, Table 1.3.1 of 142S (lb/1000 gal) where S equals 0.05% sulfur in the fuel oil. Convert to lb/mmBtu by dividing by 140 mmBtu/1000 gallons fuel.

The permittee shall demonstrate compliance with this emission limitation through the recording requirements under the Monitoring and Recordkeeping Requirements in section d) of this permit. If required, the permittee shall demonstrate compliance with this emission limitation through the methods and procedures of OAC rule 3745-18-04(E)(3). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

combust no oil that contains greater than 0.05 weight percent sulfur

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation through the recording requirements under the Monitoring and Recordkeeping Requirements in section d) of this permit.

[OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

0.001 pound SO<sub>2</sub> per mmBtu of heat input when combusting natural gas.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit based upon the natural gas emission factor (0.6 pound of SO<sub>2</sub> per million cubic feet of natural gas) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with this emission limitation through the methods and procedures of OAC rule 3745-18-04(E)(3). Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

h. Emission Limitation:

2.86 tons SO<sub>2</sub> per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit operating at maximum capacity (25.8 mmBtu per hour) for 8760 hours per year (226,008 mmBtu per year), while utilizing the maximum allowable quantity of fuel oil (800,000 gallons per year). At 140 mmBtu per 1000 gallons, fuel oil usage accounts for 112,000 mmBtu of heat input per year. The balance of the heat input from the combustion of natural gas (226,008 - 112,000) equals 114,008 mmBtu per year.

The annual emissions of SO<sub>2</sub> may be calculated as the sum of the emissions from fuel oil combustion added to the emissions from natural gas combustion. Fuel oil emissions may be calculated by multiplying the technical emissions limitation (0.05 pound of SO<sub>2</sub> per mmBtu of heat input) by the distillate fuel oil heat input (112,000 mmBtu per year) and dividing by 2000 pounds per ton. Natural gas emissions may be calculated by multiplying the technical emissions limitation (0.001 pound of SO<sub>2</sub> per mmBtu of natural gas) by the maximum fuel oil usage rate (114,008 mmBtu of natural gas per year) and dividing by 2000 pounds per ton.

$$(0.05 \text{ lb/mmBtu})(112,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 2.80 \text{ tpy}$$

$$(0.001 \text{ lb/mmBtu})(114,008 \text{ mmBtu /yr})(1 \text{ t}/2000 \text{ lb}) = 0.06 \text{ tpy}$$

[OAC rule 3745-77-07(C)(1)]

i. Emission Limitation:

The combined emissions of sulfur dioxide (SO<sub>2</sub>) from emissions units B008 through B011 and B013, shall not exceed 3.16 tons per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for five emissions units utilizing the allowable quantity of fuel oil (800,000 gallons per year) and the allowable quantity of natural gas (700,000 mscf per year). At 140 mmBtu per 1000 gallons, fuel oil usage accounts for 714,000 mmBtu of heat input per year.

The annual emissions of SO<sub>2</sub> may be calculated as the sum of the emissions from fuel oil combustion added to the emissions from natural gas combustion. Fuel oil emissions may be calculated by multiplying the technical emissions limitation (0.05 pound of SO<sub>2</sub> per mmBtu of heat input) by the distillate fuel oil heat input (112,000 million Btu per year) and dividing by 2000 pounds per ton. Natural gas emissions may be calculated by multiplying the technical emissions limitation (0.001 pound of SO<sub>2</sub> per mmBtu of natural gas) by the maximum natural gas usage rate (714,000 mmBtu of natural gas per year) and dividing by 2000 pounds per ton.

$$(0.05 \text{ lb/mmBtu})(112,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 2.80 \text{ tpy}$$

$$(0.001 \text{ lb/mmBtu})(714,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 0.36 \text{ tpy}$$

[OAC rule 3745-77-07(C)(1)]

j. Emission Limitation:

0.0075 pound PE per mmBtu of heat input when combusting gas

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit using flue gas recirculation based upon manufacturer's emissions factors.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR, Part 60 Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

k. Emission Limitation:

0.014 pound PE per mmBtu of heat input when combusting fuel oil

Applicable Compliance Method:

Compliance with this emission limitation may be determined by dividing the distillate fuel oil emission factor (2 pounds of PE per 1000 gallons) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-1 (5/10), by the distillate fuel oil heat content (140 mmBtu per 1000 gallons).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR, Part 60 Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

I. Emissions Limitation:

1.21 tons PE per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit operating at maximum capacity (25.8 mmBtu per hour) for 8760 hours per year (226,008 mmBtu per year), while utilizing the maximum allowable quantity of fuel oil (800,000 gallons per year). At 140 mmBtu per 1000 gallons, fuel oil usage accounts for 112,000 mmBtu of heat input per year. The balance of the heat input from the combustion of natural gas (226,008 - 112,000) equals 114,008 mmBtu per year.

The annual emissions of PE may be calculated as the sum of the emissions from fuel oil combustion added to the emissions from natural gas combustion. Fuel oil emissions may be calculated by multiplying the emissions limitation (0.014 pound of PE per mmBtu of heat input) by the distillate fuel oil heat input (112,000 mmBtu per year) and dividing by 2000 pounds per ton. Natural gas emissions may be calculated by multiplying the technical emissions limitation (0.0075 pound of PE per mmBtu) by the maximum gas heat input (114,008 mmBtu per year) and dividing by 2000 pounds per ton.

$$(0.014 \text{ lb/mmBtu})(112,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 0.78 \text{ tpy}$$

$$(0.0075 \text{ lb/mmBtu})(114,008 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 0.43 \text{ tpy}$$

[OAC rule 3745-77-07(C)(1)]

m. Emission Limitation:

The combined emissions of PE from emissions units B008 through B011 and B013 shall not exceed 3.46 tons per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for five emissions units utilizing the allowable quantity of fuel oil (800,000 gallons per year) and the allowable quantity of natural gas (700,000 mscf per year). At 140 mmBtu per 1000 gallons, fuel oil usage accounts for 112,000 mmBtu of heat input per year. At 1,020 Btu per scf, natural gas oil usage accounts for 714,000 mmBtu of heat input per year.

The annual emissions of PE may be calculated as the sum of the emissions from fuel oil combustion added to the emissions from natural gas combustion. Fuel oil emissions may be calculated by multiplying the emissions limitation (0.014 pound of PE per mmBtu of heat input) by the distillate fuel oil heat input (112,000 million Btu per year) and dividing by 2000 pounds per ton. Natural gas emissions may be calculated by multiplying the technical emissions limitation (0.0075 pound of

PE per mmBtu of heat input) by the natural gas heat input (714,000 million Btu per year) and dividing by 2000 pounds per ton.

$$(0.014 \text{ lb/mmBtu})(112,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 0.78 \text{ tpy}$$

$$(0.0075 \text{ lb/mmBtu})(714,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 2.68 \text{ tpy}$$

[OAC rule 3745-77-07(C)(1)]

n. Emission Limitation:

0.082 pound CO per mmBtu of heat input when combusting gas

Applicable Compliance Method:

Compliance with this emission limitation may be determined by dividing the natural gas emission factor (84 lb pounds of CO per mmscf) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (7/98), by the natural gas heat content (1020 Btu per scf).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR, Part 60 Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

o. Emission Limitation:

0.040 pound CO per mmBtu of heat input when combusting fuel oil

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit using flue gas recirculation based upon manufacturer's emissions factors.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR, Part 60 Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

p. Emissions Limitation:

9.27 tons CO per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit operating at maximum capacity (25.8 mmBtu per hour) for 8760 hours per year (226,008 mmBtu per year), while utilizing the maximum allowable quantity of natural gas (226,008 mmBtu per year).

Natural gas emissions may be calculated by multiplying the technical emissions limitation (0.082 pound of CO per mmBtu) by the maximum gas heat input (226,008 mmBtu per year) and dividing by 2000 pounds per ton.

[OAC rule 3745-77-07(C)(1)]

q. Emission Limitation:

The combined emissions of CO from emissions units B008 through B011 and B013 shall not exceed 31.51 tons per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for five emissions units utilizing the allowable quantity of fuel oil (800,000 gallons per year) and the allowable quantity of natural gas (700,000 mscf per year). At 140 mmBtu per 1000 gallons, fuel oil usage accounts for 112,000 mmBtu of heat input per year. At 1,020 Btu per scf, natural gas oil usage accounts for 714,000 mmBtu of heat input per year.

The annual emissions of CO may be calculated as the sum of the emissions from fuel oil combustion added to the emissions from natural gas combustion. Fuel oil emissions may be calculated by multiplying the emissions limitation (0.036 pound of CO per mmBtu of heat input) by the distillate fuel oil heat input (112,000 million Btu per year) and dividing by 2000 pounds per ton. Natural gas emissions may be calculated by multiplying the technical emissions limitation (0.082 pound of CO per mmBtu of heat input) by the natural gas heat input (714,000 million Btu per year) and dividing by 2000 pounds per ton.

$$(0.040 \text{ lb/mmBtu})(112,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 2.24 \text{ tpy}$$

$$(0.082 \text{ lb/mmBtu})(714,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 29.27 \text{ tpy}$$

[OAC rule 3745-77-07(C)(1)]

r. Emission Limitation:

0.011 pound OC per mmBtu of heat input when combusting gas

Applicable Compliance Method:

Compliance with this emission limitation may be determined by dividing the natural gas emission factor (11 lb pounds of OC per mmscf) from AP-42,

"Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (7/98), by the natural gas heat content (1020 Btu per scf).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 of 40 CFR, Part 60 Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

s. Emission Limitation:

0.004 pound OC per mmBtu of heat input when combusting fuel oil

Applicable Compliance Method:

Compliance with this emission limitation may be determined by dividing the distillate fuel oil emission factor (0.556 pounds of OC per 1000 gallons) from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.3, Table 1.3-3 (5/10), by the distillate fuel oil heat content (140 mmBtu per 1000 gallons).

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 of 40 CFR, Part 60 Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

t. Emissions Limitation:

1.24 tons OC per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit operating at maximum capacity (25.8 mmBtu per hour) for 8760 hours per year (226,008 mmBtu per year), while utilizing the maximum allowable quantity of natural gas (226,008 mmBtu per year).

Natural gas emissions may be calculated by multiplying the technical emissions limitation (0.011 pound of OC per mmBtu) by the maximum gas heat input (226,008 mmBtu per year) and dividing by 2000 pounds per ton.

Emission Limitation:

The combined emissions of OC from emissions units B008 through B011 and B013 shall not exceed 4.15 tons per rolling, 12-month period.

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for five emissions units utilizing the allowable quantity of fuel oil (800,000 gallons per year) and the allowable quantity of natural gas (700,000 mscf per year). At 140 mmBtu per 1000 gallons, fuel oil usage accounts for 112,000 mmBtu of heat input per year. At 1,020 Btu per scf, natural gas oil usage accounts for 714,000 mmBtu of heat input per year.

The annual emissions of OC may be calculated as the sum of the emissions from fuel oil combustion added to the emissions from natural gas combustion. Fuel oil emissions may be calculated by multiplying the emissions limitation (0.004 pound of OC per mmBtu of heat input) by the distillate fuel oil heat input (112,000 million Btu per year) and dividing by 2000 pounds per ton. Natural gas emissions may be calculated by multiplying the technical emissions limitation (0.011 pound of OC per mmBtu of heat input) by the natural gas heat input (714,000 million Btu per year) and dividing by 2000 pounds per ton.

$$(0.004 \text{ lb/mmBtu})(112,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 0.22 \text{ tpy}$$

$$(0.011 \text{ lb/mmBtu})(714,000 \text{ mmBtu/yr})(1 \text{ t}/2000 \text{ lb}) = 3.93 \text{ tpy}$$

[OAC rule 3745-77-07(C)(1)]

u. Emission Limitation:

0.020 pound of PE per million Btu of actual heat input when combusting natural gas

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR, Part 60 Appendix A. Alternate, equivalent methods may be used upon approval by the Toledo Division of Environmental Services.

[OAC rule 3745-77-07(C)(1)]

v. Emission Limitation:

PE shall not exceed 0.03 pound per million Btu heat input

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance according to the procedures for particulate matter specified in Table 4 to 40 CFR Part 63, Subpart JJJJJJ.

[40 CFR Part 63, Subpart JJJJJJ]

- (2) The permittee shall comply with the applicable testing requirements required under 40 CFR Part 63, Subpart JJJJJJ, including the following sections:

63.11210(a)	demonstrate initial compliance with particulate matter limits by no later than 180 days after startup as an “oil subcategory” as defined in 63.11237
63.11210(d)	
63.11211(a)	
63.11214(b)	
63.11212(a)	stack test and site-specific test plan requirements
63.11212(b)	conduct stack tests for particulate matter according to Table 4
63.11212(c)	load and fuel requirements during testing
63.11212(d)	number of runs for each performance test
63.11212(e)	determining compliance using F-Factor methodology
63.11220(a)	conduct particulate matter stack testing no more than 37 months after the previous test, unless following 63.11220(b), or (c)
63.11220(b), (c)	alternate particulate matter performance test frequency

g) Miscellaneous Requirements

- (1) None