



State of Ohio Environmental Protection Agency

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2/22/2010

Mr. Jan-Arthur Utrecht
University of Cincinnati
P.O. Box 210218
Cincinnati, OH 45221-0218

Certified Mail

Facility ID: 1431070849
Permit Number: P0105798
County: Hamilton

RE: DRAFT AIR POLLUTION TITLE V PERMIT
Permit Type: Significant Permit Modification

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, The Cincinnati Enquirer. A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.ohio.gov/dapc> in Microsoft Word and Adobe Acrobat format. Comments will be accepted as a marked-up copy of the permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 W. Town St., 7th Floor
Columbus, Ohio 43215

and Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660

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 Hamilton County Dept. of Environmental Services at (513)946-7777.

Sincerely,

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

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

PUBLIC NOTICE
ISSUANCE OF DRAFT AIR POLLUTION Title V Permit
University of Cincinnati

Issue Date: 2/22/2010

Permit Number: P0105798

Permit Type: Significant Permit Modification

Permit Description: Central Utility and East Campus Utility Plants (CUP & ECUP)

Facility ID: 1431070849

Facility Location: University of Cincinnati
Clifton Campus,
Cincinnati, OH 45221

Facility Description: Colleges, Universities, and Professional Schools

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control Title V operating permit for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Mike Kramer at Hamilton County Dept. of Environmental Services, 250 William Howard Taft Pkwy. or (513)946-7777. The permit, which includes a detailed description of the operations, and associated statement of basis for the permit requirements, can be downloaded from the Web page: www.epa.ohio.gov/dapc

Statement of Basis For Air Pollution Title V Permit

Facility ID:	1431070849
Facility Name:	University of Cincinnati
Facility Description:	University
Facility Address:	Clifton Campus, Cincinnati, Ohio 45221
Permit #:	P0105798

This facility is subject to Title V because it is major for:

Lead
 Sulfur Dioxide
 Carbon Monoxide
 Volatile Organic Compounds
 Nitrogen Oxides
 Particulate Matter ≤ 10 microns
 Single Hazardous Air Pollutant
 Combined Hazardous Air Pollutants
 Maximum Available Control Technology Standard(s)

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)?	NA
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)	NA
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)	Two 14.5 Natural Gas/Diesel fuel fired turbines with 98.5 MMBtu/hr duct burners, PTI 14-05950
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)	NA
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-	NA

B. Facility-Wide Terms and Conditions			
Term and Condition (paragraph)	Basis		Comments
	SIP (3745-)	Other	

C Emissions Unit Terms and Conditions
<p>Key: EU = emissions unit ID ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit) OR = operational restriction M = monitoring requirements St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement ENF = did noncompliance issues drive the monitoring requirements? R = record keeping requirements Rp = reporting requirements ET = emission testing requirements (not including compliance method terms) Misc = miscellaneous requirements</p>

EU(s)	Limitation	Basis		N	OR	M	St	ENF	R	St	Rp	St	ET	Misc	Comments	
		SI (3	Other													
P003, P004	1.08 lbs of PE/hr	N	31- 05(A)	N	Y	N	N	N	Y	N	Y	N	N	N	N	The particulate mission limitation contained in the PTI was

	during normal operation without duct burner firing		(3)													based on the individual emissions unit's potential to emit while burning natural gas. The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except during startup/ shutdown or backup operation
	2.07 lbs of PE/hr during normal operation with duct burner firing	N	31-05(A)(3)	N	Y	N	N	N	Y	N	Y	N	N	N		The particulate mission limitation contained in the PTI was based on the individual emissions unit's potential to emit while burning natural gas. The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except during startup/ shutdown or backup operation
	1.79 lbs of PE/hr during backup operation	N	31-05(A)(3)	N	Y	N	N	N	Y	N	Y	N	N	N		The particulate mission limitation contained in the PTI was based on the individual emissions unit's potential to emit while burning diesel fuel. The appropriate OR/M/R/Rp is in place to document that only diesel fuel is being burned during backup operations
	0.10 lb of SO2/hr during normal operation without duct burner firing	N	31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N		The SO2 emission limitation contained in the PTI was based on the individual emissions unit's potential to emit while burning natural gas. The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except during startup/ shutdown or backup operation

	0.16 lb of SO2/hr during normal operation without duct burner firing	N	31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N	The SO2 emission limitation contained in the PTI was based on the individual emissions unit's potential to emit while burning natural gas. The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except during startup/ shutdown or backup operation
	7.54 lbs of SO2/hr during backup operation	N	31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N	The SO2 limitation contained in the PTI was based on the individual emissions unit's potential to emit while diesel fuel. The appropriate OR/M/R/Rp is in place to document that only diesel fuel is being burned during backup operation
	0.56 lb of OC/hr during normal operation without duct burner firing	N	31-05(A)(3)	N	Y	N	N	N	Y	N	Y	N	N	N	The organic compounds limitation contained in the PTI was based on the individual emissions unit's potential to emit while burning natural gas. The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except during startup/ shutdown or backup operation
	0.78 lb of OC/hr during normal operation with duct burner firing	N	31-05(A)(3)	N	Y	N	N	N	Y	N	Y	N	N	N	The organic compounds limitation contained in the PTI was based on the individual emissions unit's potential to emit while burning natural gas. The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except during startup/ shutdown or

															backup operation
	0.55 lb of OC/hr during backup operation	N	31-05(A)(3)	N	Y	N	N	N	Y	N	Y	N	N	N	The organic compounds limitation contained in the PTI was based on the individual emissions unit's potential to emit while burning diesel. The appropriate OR/M/R/Rp is in place to document that only diesel fuel is being burned during backup operation
	1.97 lbs of CO/hr during normal operation without duct burner firing	N	31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N	A CO CEM is utilized to demonstrate compliance.
	2.84 lbs of CO/hr during normal operation with duct burner firing	N	31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N	A CO CEM is utilized to demonstrate compliance..
	1.92 lbs of CO/hr during backup operation	N	31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N	A CO CEM is utilized to demonstrate compliance.
	14.7 lbs of NOx/hr and 25 ppmvd at 15% O2 during normal operation	31		N	Y	Y	N	N	Y	N	Y	N	N	N	A NOx CEM is utilized to demonstrate compliance.

	without duct burner firing														
	0.10 lbs of NOx/MM Btu heat input, and 24.56 lbs of NOx/hr during normal operation with duct burner firing	31		N	Y	Y	N	N	Y	N	Y	N	N	N	A NOx CEM is utilized to demonstrate compliance.
	54.91 lbs of NOx/hr and 96 ppmvd at 15% O2 during backup operation	31		N	Y	Y	N	N	Y	N	Y	N	N	N	A NOx CEM is utilized to demonstrate compliance.

	0.0073 lb of PM10 /MMBtu and 1.08 lbs of PM10/hr during normal operation without duct burner firing	31		N	Y	N	N	N	Y	N	Y	N	N	N	The PM10 compounds limitation contained in the PTI was based on the individual emissions unit's potential to emit while burning natural gas. The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except during backup operation
	0.0084 lb of PM10 /MMBtu and 2.07 lbs of PM10/hr during normal operation without duct burner firing	31		N	Y	N	N	N	Y	N	Y	N	N	N	The PM10 compounds limitation contained in the PTI was based on the individual emissions unit's potential to emit while burning natural gas. The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except during backup operation
	0.013 lb of PM10	31		N	Y	N	N	N	Y	N	Y	N	N	N	The PM10 compounds limitation contained in the PTI was

	/MMBtu and 1.79lb of PM10/hr during backup operation															based on the individual emissions unit's while burning natural gas. The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except during backup operation
	NOx emissions shall not exceed 183.0 tons per year	31		N	Y	Y	N	N	Y	N	Y	N	N	N	N	A NOx CEM is utilized to demonstrate compliance.
	PM10 emissions shall not exceed 14.0 tons per year	31		N	Y	N	N	N	Y	N	Y	N	N	N	N	The PM10 limitations contained in the PTI were based on the emission units potential to emit while burning natural gas and diesel fuel during backup operation. The appropriate OR/M/R/Rp is in place to document that only natural

															gas is being burned except backup operation
	PE emissions shall not exceed 14.0 tons per year	N	31-05(D)	N	Y	N	N	N	Y	N	Y	N	N	N	The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except backup operation
	Sulfur dioxide emissions shall not exceed 3.3 tons per year	N	31-05(D)	N	Y	Y	N	N	Y	N	Y	N	N	N	The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except backup operation
	OC emissions shall not exceed 14.0 tons per year	N	31-05(D)	N	Y	Y	N	N	Y	N	Y	N	N	N	The appropriate OR/M/R/Rp is in place to document that only natural gas is being burned except backup operation
	CO emissions shall not exceed 85.7 tons per year	N	31-05(D)	N	Y	Y	N	N	Y	N	Y	N	N	N	A CO CEM is utilized to demonstrate compliance
	10% opacity as a six-minute average		31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N	Individual emissions units are restricted to burn only natural gas or diesel fuel in backup operation. The appropriate

															OR/M/R/Rp is in place to document that only natural gas or diesel fuel is being burned.
	Benzene emissions shall not exceed 0.0026 ton per year	31	No	N	N	N	N	N	N	N	N	N	N	N	Compliance shall be established thru emission factor listed in AP-42 and associated control efficiency of the control device (catalytic oxidizer).
	NOx emissions shall not exceed 30.0 pounds per startup/shut down cycle when burning natural gas		31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N	A NOx CEM is utilized to demonstrate compliance
	CO emissions shall not exceed 275.0		31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N	A CO CEM is utilized to demonstrate compliance

	pounds per startup/shut down cycle when burning natural gas														
	NOx emissions shall not exceed 72.0 pounds per startup/shut down cycle when burning diesel fuel	31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N	N	A NOx CEM is utilized to demonstrate compliance
	CO emissions shall not exceed 275.0 pounds per startup/shut down cycle when burning diesel fuel	31-05(A)(3)	N	Y	Y	N	N	Y	N	Y	N	N	N	N	A CO CEM is utilized to demonstrate compliance



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

DRAFT

Air Pollution Title V Permit
for
University of Cincinnati

Facility ID: 1431070849

Permit Number: P0105798

Permit Type: Significant Permit Modification

Issued: 2/22/2010

Effective: To be entered upon final issuance

Expiration: To be entered upon final issuance



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Air Pollution Title V Permit
 for
 University of Cincinnati

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Title V Permit
Permit Number: P0105798
Facility ID: 1431070849

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 1431070849
Facility Description: Central Utility and East Campus Utility Plants (CUP & ECUP)
Application Number(s): A0037873
Permit Number: P0105798
Permit Description: Central Utility and East Campus Utility Plants (CUP & ECUP)
Permit Type: Significant Permit Modification
Issue Date: 2/22/2010
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number:

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

University of Cincinnati
Clifton Campus
Cincinnati, OH 45221

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

Hamilton County Dept. of Environmental Services
250 William Howard Taft Pkwy.
Cincinnati, OH 45219-2660
(513)946-7777

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Hamilton County Dept. 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

Chris Korleski
Director



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Title V Permit

Permit Number: P0105798

Facility ID: 1431070849

Effective Date: To be entered upon final issuance

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



(3) a combination of (1) and (2) above.

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

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

8. Fees

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

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

9. Marketable Permit Programs

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

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

10. Reasonably Anticipated Operating Scenarios

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

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

11. Reopening for Cause

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

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



statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.
(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

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

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

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible 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.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the 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.)

25. Records Retention Requirements Under State Law Only

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

26. Inspections and Information Requests

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



EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

27. Scheduled Maintenance/Malfunction Reporting

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).

28. 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))

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Title V Permit

Permit Number: P0105798

Facility ID: 1431070849

Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Title V Permit

Permit Number: P0105798

Facility ID: 1431070849

Effective Date: To be entered upon final issuance

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Draft Title V Permit

Permit Number: P0105798

Facility ID: 1431070849

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. P003, CTG 1

Operations, Property and/or Equipment Description:

14.5 MW Natural Gas/ No. 2 Fuel Oil fired Turbines with 98.5 MMBtu/hr duct burner

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC Rule 3745-31-05(A)(3)	<p>See terms and conditions b)(2)e. and b)(2)g. through b)(2)m.</p> <p>EMISSION LIMITS DURING NORMAL OPERATION WITHOUT DUCT BURNER FIRING:</p> <p>Particulate matter (PM) emissions shall not exceed 1.08 lbs/hr;</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.10 lb/hr;</p> <p>Organic compounds (OC) emissions shall not exceed 0.56 lb/hr; and</p> <p>Carbon monoxide (CO) emissions shall not exceed 1.97 lbs/hr.</p> <p>EMISSION LIMITS DURING NORMAL OPERATION WITH DUCT BURNER FIRING:</p> <p>Particulate matter (PM) emissions shall not exceed 2.07 lbs/hr;</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.16 lb/hr;</p> <p>Organic compounds (OC) emissions shall not exceed 0.78 lb/hr; and</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Carbon monoxide (CO) emissions shall not exceed 2.84 lbs/hr.</p> <p>EMISSION LIMITS DURING BACKUP OPERATION:</p> <p>Particulate matter (PM) emissions shall not exceed 1.79 lbs/hr;</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 7.54 lbs/hr;</p> <p>Organic compounds (OC) emissions shall not exceed 0.55 lbs/hr; and</p> <p>Carbon monoxide (CO) emissions shall not exceed 1.92 lbs/hr.</p> <p>The requirements of this Rule include compliance with the requirements of OAC Rule 3745-31-10 through 3745-31-20, OAC Rule 3745-31-05(D), 40 CFR Part 60, Subpart GG and 40 CFR Part 60, Subpart Dc.</p>
b.	OAC Rule 3745-31-10 through 3745-31-20.	<p>EMISSION LIMITS DURING NORMAL OPERATION WITHOUT DUCT BURNER FIRING:</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 25 ppmvd at 15% oxygen and 14.71 lbs/hr; and</p> <p>PM₁₀ emissions shall not exceed 0.0073 lb/mmBtu and 1.08 lbs/hr.</p> <p>EMISSION LIMITS DURING NORMAL OPERATION WITH DUCT BURNER FIRING:</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 0.10 lb/mmBtu and 24.56 lbs/hr; and</p> <p>PM₁₀ emissions shall not exceed 0.0084 lb/mmBtu and 2.07 lbs/hr.</p> <p>EMISSION LIMITS DURING BACKUP OPERATION:</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Nitrogen oxides (NO_x) emissions shall not exceed 96 ppmvd at 15% oxygen and 54.91 lbs/hr; and</p> <p>PM10 emissions shall not exceed 0.013 lb/mmBtu and 1.79 lbs/hr.</p> <p>EMISSIONS FROM THE TURBINES AND DUCT BURNERS FOR EMISSIONS UNITS P003 AND P004 COMBINED, AT ALL LOAD CONDITIONS, INCLUDING STARTUP/SHUTDOWN AND NORMAL AND BACKUP OPERATION:</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 183.0 TPY*;</p> <p>PM10 emissions shall not exceed 14.0 TPY*; and</p> <p>Benzene emissions shall not exceed 0.0026 TPY*.</p>
c.	OAC Rule 3745-31-05(D)	<p>EMISSIONS FROM THE TURBINES AND DUCT BURNERS FOR EMISSIONS UNITS P003 AND P004 COMBINED, AT ALL LOAD CONDITIONS, INCLUDING STARTUP/SHUTDOWN AND NORMAL AND BACKUP OPERATION:</p> <p>Particulate matter (PM) emissions shall not exceed 14.0 TPY*;</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 3.3 TPY*;</p> <p>Organic compounds (OC) emissions shall not exceed 6.7 TPY*; and</p> <p>Carbon monoxide (CO) emissions shall not exceed 85.7 TPY*.</p>
d.	40 CFR 60, Subpart GG	See b)(2)a., d)(13), and d)(14).
e.	40 CFR 60, Subpart Dc	See d)(16)
f.	OAC Rule 3745-18-06(F)	The emission limitation specified by this Rule is less stringent than the emission



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		limitation established pursuant to OAC Rule 3745-31-05(A)(3).
g.	OAC Rule 3745-17-07(A)	The emission limitation specified by this Rule is less stringent than the emission limitation established pursuant to OAC Rule 3745-31-05(A)(3).
h.	OAC Rule 3745-17-11(B)(4)	The emission limitation specified by this Rule is less stringent than the emission limitation established pursuant to OAC Rule 3745-31-05(A)(3).
i.	40 CFR Part 75	See b)(2)b.
j.	OAC Rule 3745-103	See b)(2)b.
k	40 CFR Part 63, Subpart YYYY (40 CFR Part 63.6080 -6175) [In accordance with 40 CFR 63.6090(a) and (a)(1), this emissions unit is an existing stationary combustion turbine due to commence construction occurred on or before January 14, 2003 located at a major source of hazardous air pollutants (HAPs).]	Pursuant to 40 CFR Part 63.6090(b)(4) existing stationary combustion turbines in all subcategories do not have to meet the requirements of 40 CFR Part 63, Subpart YYYY and of Subpart A. No initial notification is necessary for any existing stationary combustion turbine, even if a new or reconstructed turbine in the same category would require an initial notification.
l.		* Based on a rolling, 12-month summation
		Assume PM = PM10

(2) Additional Terms and Conditions

- a. The emissions limits based on this applicable Rule are equivalent to or less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3) and OAC Rule 3745-31-10 through 3745-31-20. Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60, Subpart GG.
- b. If the permittee is subject to the requirements of 40 CFR Part 72 and 75 concerning acid rain, the permittee shall ensure that any effected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted there under, are prohibited.
- c. Compliance with OAC Rule 3745-31-05(A)(3) shall be demonstrated by the use of dry low NOx burners (SoLoNox technology) with a 25.0 ppm NOx emission limit during normal operation, a catalytic oxidizer to control CO and VOC emissions at a CO design destruction efficiency of at least 89 percent by weight, and limited usage of diesel fuel in the turbine and natural gas in the duct burner.



- 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. Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average except during periods of malfunction as provided in OAC Rule 3745-17-07(A)(3)(c).
 - f. The hourly emission limitation(s) for PM, PM10, SO2 and VOC outlined in b)(1) are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.
 - g. "Normal Operation" shall be defined as the period when the combustion turbine achieves dry low NOx (SoLoNox) mode, burning natural gas at steady state operation, between an electrical output of 7.25 megawatts and full load.
 - h. "Backup Operation" shall be defined as the period when the combustion turbine achieves dry low NOx (SoLoNox) mode, burning diesel fuel at steady state operation, between an electrical output of 9.43 megawatts and full load. Duct burners shall not operate during periods of backup operation.
 - i. "Full Load" shall be defined as a load equal to the maximum actual electrical output of 13.5 megawatts (depending on the ambient temperature and relative humidity).
 - j. "Startup" shall be defined as the period between initial fuel light-off in the combustion turbine until the combustion turbine reaches normal or backup operations.
 - k. "Shutdown" shall be defined as the period beginning when the combustion turbine leaves normal or backup operations until combustion has ceased.
 - l. When burning natural gas, during startup/shutdown cycle, the following emission limits shall not be exceeded for this emission unit:

NOx = 30.0 lbs/ startup/shutdown cycle; and

CO = 275 lbs/ startup/shutdown cycle.
 - m. When burning diesel fuel, during startup/shutdown cycle, the following emission limits shall not be exceeded for this emission unit:

NOx = 72.0 lbs/ startup/shutdown cycle; and

CO = 275 lbs/ startup/shutdown cycle.
- c) Operational Restrictions
- (1) The permittee shall only burn natural gas in the duct burner portion of this emissions unit, and except as allowed in c)(3) of this permit, the permittee shall only burn natural



gas in the combustion turbine portion of this emission unit. The maximum sulfur content of natural gas shall not exceed 2 grains per 100 standard cubic feet.

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

- (2) The sulfur content of the diesel fuel used in this combustion turbine shall not exceed 0.05 percent by weight.

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

- (3) The maximum annual operating hours while burning diesel fuel in the combustion turbines for emissions units P003 and P004 combined shall not exceed 576 hours, based upon a rolling, 12-month summation of the operating hours.

(Authority for term: OAC Rule 3745-77-07(A)(1), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (4) The maximum annual natural gas usage for the duct burners of emissions units P003 and P004 combined shall not exceed 1000 million standard cubic feet, based upon a rolling, 12-month summation of the natural gas usage figures.

(Authority for term: OAC Rule 3745-77-07(A)(1), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (5) Duct burners shall not operate during backup mode operation.

(Authority for term: OAC Rule 3745-77-07(A)(1), OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (6) The number of startup/shutdown cycles per year shall not exceed 480 cycles for emissions units P003 and P004 combined.

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

- (7) A startup/shutdown cycle shall not exceed a maximum total duration of 60 minutes.

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

- (8) The maximum annual heat input rate to the combustion turbines of emissions units P003 and P004 combined shall not exceed 2,354,400 mmBtu, based upon a rolling, 12-month summation of the fuel usage figures.

(Authority for term: OAC Rule 3745-77-07(A)(1), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (9) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the operational restrictions in this permit are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #14-05950, issued on June 12, 2008: c)(1) through c)(8). The operational restrictions contained in the above-referenced Permit to Install are subsumed into the operational restrictions of this operating permit, so that compliance with these requirements constitutes compliance with the underlying operational restrictions in the Permit to Install.



(Authority for term: OAC Rule 3745-77-07(A)(3)(a)(ii))

d) Monitoring and/or Recordkeeping Requirements

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

- a. the emissions unit's actual electrical output for each operating hour; and
- b. for each day during which the permittee burns a fuel other than natural gas and/or diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

(2) The permittee shall maintain monthly records of the following information from emissions units P003 and P004, combined:

- a. The natural gas usage rate in the combustion turbines for each month (in standard cubic feet).
- b. The natural gas usage rate in the duct burners for each month (in standard cubic feet).
- c. The diesel fuel usage rate in the combustion turbines for each month (in gallons).
- d. The hours of operation of the combustion turbines.
- e. The hours of operation of the duct burners and the fuel used during those hours of operation.
- f. The hours of operation of the combustion turbines while burning diesel fuel.
- g. The number of startup/shutdown cycles for each month.
- h. The rolling, 12-month summation of the hours of operation of the combustion turbines while burning diesel fuel.
- i. The rolling, 12-month summation of the natural gas usage rate in the duct burner.
- j. The monthly emission rate for NOx, CO, SO2, PM/PM10 and VOC, in tons.
- k. The rolling, 12-month summation of NOx, CO, SO2, PM/PM10 and VOC, in tons.

(Authority for term: OAC Rule 3745-77-07(C)(1) and OAC Rule 3745-31-05(A)(3)), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D)))

(3) The rolling, 12-month summation of the actual heat input rate of the combustion turbine. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the startup and shutdown emission limitations and operational restrictions:

- a. the date and duration, in minutes, of each startup and shutdown cycle;



- b. the emissions, in pounds, for NO_x and CO when burning natural gas for each startup and shutdown cycle; and
- c. the emissions, in pounds, for NO_x and CO when burning diesel fuel for each startup and shutdown cycle.

The permittee shall use the continuous NO_x and CO emissions monitoring data to determine the NO_x and CO emissions for these emissions units. During any period when the NO_x and/or the CO emissions monitoring systems are not operational, the permittee shall use the appropriate missing data procedures specified in 40 CFR Part 75 to determine NO_x and CO (although 40 CFR Part 75 pertains mainly to determining NO_x and SO₂ emissions and not to determining CO emissions, the permittee may use the same procedures allowed in 40 CFR Part 75 to determine NO_x emissions to determine CO emissions) emissions or an approved data substitution protocol. The data substitution values shall not be used to demonstrate compliance with the hourly NO_x and CO emission limitations applicable during normal or backup operation of this emissions unit.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG and OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

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

The permittee shall collect or require the diesel fuel supplier to collect a representative grab sample for each shipment of diesel fuel that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.

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

- (5) Continuous NO_x Monitoring - Certified Systems Statement of Certification

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 or 40 CFR Part 75 (The permittee may use 40 CFR Part 75 continuous emissions monitoring systems (CEMS) methodology using fuel flow monitors in conjunction with CEMS data to determine NO_x mass emissions if it is done in accordance with the provisions listed 40 CFR Part 75) for approval by the Ohio EPA, Central Office.



Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of such equipment pursuant to the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 2 and Performance Specification 6 or 40 CFR Part 75 if low mass emission criteria described in 40 CFR Part 75 have been met. When 40 CFR Part 75 CEMS methodology using fuel flow monitors in conjunction with CEMS data to determine mass emissions, the Relative Accuracy requirements of 40 CFR Part 60, Performance Specification 6 are still required to be met, although other requirements from this performance specification may not be required. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC Rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 2, Performance Specification 6, and 40 CFR Part 75 where applicable.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 75, 40 CFR Part 60 Subpart GG and OAC rules 3745-31-10 through 3745-31-20))

- (6) The permittee shall operate and maintain existing equipment to continuously monitor and record NO_x from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements of the appropriate sections specified in 40 CFR Part 60.13. When 40 CFR Part 75 CEMS methodology using fuel flow monitors in conjunction with CEMS data for mass emissions determinations, fuel flow meters shall meet the requirements of 40 CFR Part 75, Appendix D, Sections 2.1.2 and 2.1.5.

Data necessary for mass emission calculations per 40 CFR Part 75, Appendix D shall be recorded.

The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

During any period when the continuous NO_x emission monitoring systems are not operational, the permittee shall use the appropriate missing data procedures specified in 40 CFR Part 75 to determine the NO_x emissions.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, 40 CFR Part 60 Subpart GG and OAC rules 3745-31-10 through 3745-31-20))



(7) Continuous CO Monitoring - Certified Systems Statement of Certification

Prior to the installation of the continuous CO monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6, or 40 CFR Part 75 (The permittee may use 40 CFR Part 75 CEMS methodology using fuel flow monitors in conjunction with CEMS data to determine CO mass emissions if it is done in a manner consistent with NO_x mass emissions determinations as allowed in 40 CFR Part 75) for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of the continuous CO monitoring system pursuant to ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 4A and Performance Specification 6. If 40 CFR Part 75 CEMS methodology using fuel flow monitors in conjunction with CEMS data to determine mass emissions, the Relative Accuracy requirements of 40 CFR Part 60, Performance Specification 6 are still required to be met, although other requirements from this performance specification may not be required. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC Rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 4A and Performance Specification 6.

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, 40 CFR Part 60 Subpart GG and OAC Rule 3745-31-05(A)(3))

(8) The permittee shall operate and maintain equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. When 40 CFR Part 75 CEMS methodology using fuel flow monitors in conjunction with CEMS data to determine mass emissions, fuel flow meters shall meet the requirements of 40 CFR Part 75, Appendix D, Sections 2.1.2 and 2.1.5.

Data necessary for mass emission calculations per 40 CFR Part 75, Appendix D shall be recorded. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, parts per million CO on an instantaneous (one minute) basis, emissions of CO in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling,



annual, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, 40 CFR Part 60 Subpart GG and OAC Rule 3745-31-05(A)(3))

(9) Continuous O₂ or CO₂ Monitoring - Certified Systems Statement of Certification

Prior to the installation of the continuous O₂ monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 3 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of such equipment pursuant to the appropriate sections of ORC section 3704.03(I), and 40 CFR Part 60, Appendix B, Performance Specification 3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC Rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous O₂ monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of the appropriate sections of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 3.

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous O₂ monitoring system designed to ensure continuous valid and representative readings of O₂. The plan shall follow the requirements of the appropriate sections of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous O₂ monitoring system must be kept on site and available for inspection during regular office hours.

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of the appropriate sections of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B, Section 1.3 for fuel flow monitors. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

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

(10) The permittee shall operate and maintain equipment to continuously monitor and record O₂ from this emissions unit in percent O₂. Such continuous monitoring and recording equipment shall comply with the requirements in the appropriate sections specified in 40 CFR Part 60.13.



The permittee shall maintain records of all data obtained by the continuous O₂ monitoring system including, but not limited to, percent O₂ on an instantaneous (one-minute) basis, emissions of O₂ results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

- (11) The permittee shall maintain hourly records of the following information for this emissions unit:

a. In lb(s)/hr emissions rate for NO_x and CO as obtained from d)(6) and d)(8), and NO_x ppmvd@15% O₂ as obtained from d)(6) based upon an hourly averaging period as allowed in the appropriate sections of 40 CFR Part 60.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendices B & F, 40 CFR Part 60 Subpart GG, OAC rules 3745-31-10 through 3745-31-20) and OAC 3745-31-05(D))

- (12) The permittee maintain records demonstrating that the natural gas fired in this emission unit meets the definition of natural gas in 40 CFR 60.331(u). The permittee shall use one of the following sources of information to make the required demonstration:

a. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content if the fuel is 2.0 grains/100 scf or less; or

b. Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 2.0 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR 75 is required.

(Authority for term: OAC Rule 3745-77-07(C)(1) and OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (13) The permittee shall use one of the total sulfur sampling options and the associated sampling frequency as described in sections 2.2.3 of appendix D to 40 CFR 75 (i.e. flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with the fuel oil already in the intended storage tank).

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 75, Appendix D, 40 CFR Part 60 Subpart GG, and OAC Rule 3745-31-05(A)(3))

- (14) The permittee shall maintain documentation on the sulfur contents of the fuels as required in 40 CFR 60.334(h)(3) and (i).

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60.334(h)(3) and (i), 40 CFR Part 60 Subpart GG, and OAC Rule 3745-31-05(A)(3))

- (15) The permittee shall perform weekly checks, when this emissions unit is in operation, during daylight hours, and when weather conditions allow, for any visible particulate



emissions from the stack/stacks serving this/these emissions unit(s). The presence or absence of any visible emissions shall be noted in an operation log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and,
- e. any corrective actions taken to eliminate the visible emissions.

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

- (16) The permittee shall maintain daily records of the natural gas usage rate in the duct burner.

(Authority for term: OAC Rule 3745-77-07(C)(1), OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D) and 40 CFR 60 Subpart Dc)

- (17) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements in this permit are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #14-05950, issued on June 12, 2008: d)(1) through d)(16). 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.

(Authority for term: 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 diesel fuel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurred.

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

- (2) The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation while burning diesel fuel in the combustion turbines of emissions units P003 and P004. These reports are due by the date described in the Standard Terms and Conditions of this permit.

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

- (3) The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month actual heat input limitation to the combustion turbine; the rolling, 12-month natural gas usage limitation for the duct burners for emissions units P003 and



P004. These reports are due by the date described in the Standard Terms and Conditions of this permit.

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

- (4) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide limitation specified in c)(2) of this permit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

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

- (5) Pursuant to OAC Rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), 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 the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in 40 CFR Part 76 and any limitations specified in the terms and conditions of this permit or variance. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

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 any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

Pursuant to OAC Rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission reports pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 60.7 and 60.13, and OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))



- (6) Pursuant to OAC Rules 3745-15-04, and ORC sections 3704.03(l) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), 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 the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any applicable limitation(s) specified in OAC Chapter 3745-21, 40 CFR Part 60, or any limitation(s) specified in the terms and conditions of this permit, in units of the standard. These reports shall also contain the total CO emissions for the calendar quarter (in tons).

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 any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

Pursuant to OAC Rules 3745-15-04, and ORC sections 3704.03(l) and 3704.031, the permittee shall submit a summary of the excess emission reports pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 60.7 and 60.13, and OAC Rule 3745-31-05(A)(3))

- (7) Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of continuous O₂ monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report. These quarterly reports shall be submitted by January 31, April 30, July 31 and October 31 of each year and shall address the data obtained during the previous calendar quarter.



(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 60.7 and 60.13, and OAC Rule 3745-31-05(A)(3))

- (8) The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 2 grains per standard 100 cubic foot. These reports are due by the date described in the Standard Terms and Conditions of this permit.

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

- (9) In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports for emissions unit P003 in accordance with this permit.

(Authority for term: OAC Rule 3745-77-07(C)(1) and Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D)

- (10) The permittee shall submit semiannual written reports which (a) identify all weeks during which any visible particulate emissions were observed from the stack serving these emissions units and (b) if needed describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6 calendar month period.

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

- (11) The permittee shall submit annual reports which specify the total NOx, SO2, OC, PM/PM10 and CO emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. The CAA, Title V Fee Emission Report (FER) required to be submitted annually by April 15 for the facility will also satisfy the emission reporting requirement of this condition.

(Authority for term: OAC Rule 3745-77-07(C)(1), Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D)

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

Pursuant to 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

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



Reports are to be sent to:

Hamilton County Department of Environmental Services

250 William Howard Taft Rd.

Cincinnati, Ohio 45219

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 60.7, and OAC Rule 3745-31-05(A)(3) OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (13) The permittee shall submit deviation (excursion) reports which identify all exceedances of the NOx and CO emissions limitations for each startup/shutdown cycle as specified in b)(2)l. and b)(2)m.

(Authority for term: OAC Rule 3745-77-07(C)(1), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (14) The permittee shall submit deviation (excursion) reports which identify all exceedances of the number of startup/shutdown cycles limit in c)(6) or the startup/shutdown duration limit in c)(7).

(Authority for term: OAC Rule 3745-77-07(C)(1), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (15) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the reporting requirements in this permit are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #14-05950, issued on June 12, 2008: d)(1) through d)(14). The reporting 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 reporting requirements in the Permit to Install.

(Authority for term: OAC Rule 3745-77-07(A)(3)(a)(ii))

f) Testing Requirements

- (1) Compliance with the allowable emission limitations in b)(1)of this permit shall be determined according to the following methods:

a. NOx Emission Limitations:

See b)(1).

Applicable Compliance Method:

Initial compliance with the allowable outlet concentration, and the lbs/hr emission limitations shall be demonstrated by test results from the most recent compliance demonstration, and continual compliance with those limitations shall be demonstrated by the use of the CEM in condition d)(6) based upon an hourly averaging period. Compliance with the annual emission limitation shall be determined by the record keeping required in condition d)(2).



(Authority for term: OAC Rule 3745-77-07©(1), 40 CFR 60.13, 40 CFR Part 60, Appendices B & F, 40 CFR Part 60 Subpart GG and OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

b. PM Emission Limitation:

See b)(1).

Applicable Compliance Method:

Compliance with the lbs/hr emission limitations shall be demonstrated by test results from the most recent compliance demonstration. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

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

c. SO2 Emission Limitations:

See b)(1).

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the record keeping required in d)(2), d)(4), d)(13), and d)(14). If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

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

d. OC Emission Limitations:

See b)(1).

Applicable Compliance Method:

Compliance with the lbs/hr limitations shall be demonstrated by test results from the most recent compliance demonstration. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

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

e. CO Emission Limitation:

See b)(1).

Applicable Compliance Method:



Initial compliance with the lbs/hr emission limitations shall be demonstrated by test results from the most recent compliance demonstration, and continual compliance with those limitations shall be demonstrated by the use of the CEM in condition d)(8) based upon an hourly averaging period . Compliance with the annual emission limitation shall be determined by the record keeping required in condition d)(2).

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

f. Visible Emission Limitation:

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

Applicable Compliance Method:

Compliance with the visible emissions limitation established by this permit shall be determined by Method 9, 40 CFR Part 60 Appendix A.

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

g. Benzene Emission Limitation:

See b)(1).

Applicable Compliance Method:

Compliance with the TPY emission limitation shall be demonstrated by using the AP-42 emission factors and estimated destruction efficiencies.

(Authority for term: OAC Rule 3745-77-07(C)(1), and OAC rules 3745-31-10 through 3745-31-20)

(2) Emission Limitation:

0.05 percent sulfur by weight for the diesel fuel.

Applicable Compliance Method:

When firing diesel fuel, except as provided below, compliance with the allowable SO2 emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of diesel fuel received during a calendar month meets the limitation.

If required, the permittee shall demonstrate compliance with this emission limitation (when firing diesel fuel) in accordance with 40 CFR, Part 60, Appendix A, Method 6C.

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

(3) Compliance with the hours of operation limitation when burning diesel fuel in the combustion turbine shall be demonstrated by the record keeping in d)(2).



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

- (4) Compliance with the natural gas usage limitation for the duct burner shall be demonstrated by the record keeping in d)(2).

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

- (5) Compliance with the emissions limitations in b)(2)l. and b)(2)m. shall be demonstrated by the monitoring and record keeping required in d)(3).

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

- (6) Compliance with the limitation in c)(6) shall be demonstrated by the monitoring and record keeping required in d)(2)g.

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

- (7) Compliance with the operational restriction in c)(7) shall be demonstrated by the monitoring and record keeping required in d)(3).

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

- (8) Compliance with the annual heat input operational restriction in c)(8) shall be demonstrated by the monitoring and record keeping required in d)(2)l.

(Authority for term: OAC Rule 3745-77-07(C)(1), OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (9) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #14-05950, issued on June 12, 2008 f)(1)-f)(8). The testing requirements contained in the above-referenced Permit to install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

(Authority for term: OAC Rule 3745-77-07(A)(3)(a)(ii))

g) Miscellaneous Requirements

- (1) The terms and conditions in this Permit to install supersede the terms and conditions with regard to emissions unit P003 and P004 in Permit to install 14-05108 as issued on August 15, 2002, and modified on August 25, 2005 and May 15, 2007 and Permit to Install #14-05950, issued on June 12, 2008.



2. P004, CTG 2

Operations, Property and/or Equipment Description:

14.5 MW Natural Gas/ No. 2 Fuel Oil fired Turbines with 98.5 MMBtu/hr duct burner

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC Rule 3745-31-05(A)(3)	<p>See terms and conditions b)(2)e. and b)(2)g. through b)(2)m.</p> <p>EMISSION LIMITS DURING NORMAL OPERATION WITHOUT DUCT BURNER FIRING:</p> <p>Particulate matter (PM) emissions shall not exceed 1.08 lbs/hr;</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.10 lb/hr;</p> <p>Organic compounds (OC) emissions shall not exceed 0.56 lb/hr; and</p> <p>Carbon monoxide (CO) emissions shall not exceed 1.97 lbs/hr.</p> <p>EMISSION LIMITS DURING NORMAL OPERATION WITH DUCT BURNER FIRING:</p> <p>Particulate matter (PM) emissions shall not exceed 2.07 lbs/hr;</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 0.16 lb/hr;</p> <p>Organic compounds (OC) emissions shall not exceed 0.78 lb/hr; and</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Carbon monoxide (CO) emissions shall not exceed 2.84 lbs/hr.</p> <p>EMISSION LIMITS DURING BACKUP OPERATION:</p> <p>Particulate matter (PM) emissions shall not exceed 1.79 lbs/hr;</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 7.54 lbs/hr;</p> <p>Organic compounds (OC) emissions shall not exceed 0.55 lbs/hr; and</p> <p>Carbon monoxide (CO) emissions shall not exceed 1.92 lbs/hr.</p> <p>The requirements of this Rule include compliance with the requirements of OAC Rule 3745-31-10 through 3745-31-20, OAC Rule 3745-31-05(D), 40 CFR Part 60, Subpart GG and 40 CFR Part 60, Subpart Dc.</p>
b.	OAC Rule 3745-31-10 through 3745-31-20.	<p>EMISSION LIMITS DURING NORMAL OPERATION WITHOUT DUCT BURNER FIRING:</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 25 ppmvd at 15% oxygen and 14.71 lbs/hr; and</p> <p>PM₁₀ emissions shall not exceed 0.0073 lb/mmBtu and 1.08 lbs/hr.</p> <p>EMISSION LIMITS DURING NORMAL OPERATION WITH DUCT BURNER FIRING:</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 0.10 lb/mmBtu and 24.56 lbs/hr; and</p> <p>PM₁₀ emissions shall not exceed 0.0084 lb/mmBtu and 2.07 lbs/hr.</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>EMISSION LIMITS DURING BACKUP OPERATION:</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 96 ppmvd at 15% oxygen and 54.91 lbs/hr; and</p> <p>PM10 emissions shall not exceed 0.013 lb/mmBtu and 1.79 lbs/hr.</p> <p>EMISSIONS FROM THE TURBINES AND DUCT BURNERS FOR EMISSIONS UNITS P003 AND P004 COMBINED, AT ALL LOAD CONDITIONS, INCLUDING STARTUP/SHUTDOWN AND NORMAL AND BACKUP OPERATION:</p> <p>Nitrogen oxides (NO_x) emissions shall not exceed 183.0 TPY*;</p> <p>PM10 emissions shall not exceed 14.0 TPY*; and</p> <p>Benzene emissions shall not exceed 0.0026 TPY*.</p>
c.	OAC Rule 3745-31-05(D)	<p>EMISSIONS FROM THE TURBINES AND DUCT BURNERS FOR EMISSIONS UNITS P003 AND P004 COMBINED, AT ALL LOAD CONDITIONS, INCLUDING STARTUP/SHUTDOWN AND NORMAL AND BACKUP OPERATION:</p> <p>Particulate matter (PM) emissions shall not exceed 14.0 TPY*;</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 3.3 TPY*;</p> <p>Organic compounds (OC) emissions shall not exceed 6.7 TPY*; and</p> <p>Carbon monoxide (CO) emissions shall not exceed 85.7 TPY*.</p>
d.	40 CFR 60, Subpart GG	See b)(2)a., d)(13), and d)(14).
e.	40 CFR 60, Subpart Dc	See d)(16)



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC Rule 3745-18-06(F)	The emission limitation specified by this Rule is less stringent than the emission limitation established pursuant to OAC Rule 3745-31-05(A)(3).
g.	OAC Rule 3745-17-07(A)	The emission limitation specified by this Rule is less stringent than the emission limitation established pursuant to OAC Rule 3745-31-05(A)(3).
h.	OAC Rule 3745-17-11(B)(4)	The emission limitation specified by this Rule is less stringent than the emission limitation established pursuant to OAC Rule 3745-31-05(A)(3).
i.	40 CFR Part 75	See b)(2)b.
j.	OAC Rule 3745-103	See b)(2)b.
k	40 CFR Part 63, Subpart YYYY (40 CFR Part 63.6080 -6175) [In accordance with 40 CFR 63.6090(a) and (a)(1), this emissions unit is an existing stationary combustion turbine due to commence construction occurred on or before January 14, 2003 located at a major source of hazardous air pollutants (HAPs).]	Pursuant to 40 CFR Part 63.6090(b)(4) existing stationary combustion turbines in all subcategories do not have to meet the requirements of 40 CFR Part 63, Subpart YYYY and of Subpart A. No initial notification is necessary for any existing stationary combustion turbine, even if a new or reconstructed turbine in the same category would require an initial notification.
l.		* Based on a rolling, 12-month summation
		Assume PM = PM10

(2) Additional Terms and Conditions

- a. The emissions limits based on this applicable Rule are equivalent to or less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3) and OAC Rule 3745-31-10 through 3745-31-20. Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60, Subpart GG.
- b. If the permittee is subject to the requirements of 40 CFR Part 72 and 75 concerning acid rain, the permittee shall ensure that any effected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted there under, are prohibited.



- c. Compliance with OAC Rule 3745-31-05(A)(3) shall be demonstrated by the use of dry low NOx burners (SoLoNox technology) with a 25.0 ppm NOx emission limit during normal operation, a catalytic oxidizer to control CO and VOC emissions at a CO design destruction efficiency of at least 89 percent by weight, and limited usage of diesel fuel in the turbine and natural gas in the duct burner.
- 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. Visible particulate emissions from any stack shall not exceed 10 percent opacity, as a six-minute average except during periods of malfunction as provided in OAC Rule 3745-17-07(A)(3)(c).
- f. The hourly emission limitation(s) for PM, PM10, SO2 and VOC outlined in b)(1) are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with these limitations.
- g. "Normal Operation" shall be defined as the period when the combustion turbine achieves dry low NOx (SoLoNox) mode, burning natural gas at steady state operation, between an electrical output of 7.25 megawatts and full load.
- h. "Backup Operation" shall be defined as the period when the combustion turbine achieves dry low NOx (SoLoNox) mode, burning diesel fuel at steady state operation, between an electrical output of 9.43 megawatts and full load. Duct burners shall not operate during periods of backup operation.
- i. "Full Load" shall be defined as a load equal to the maximum actual electrical output of 13.5 megawatts (depending on the ambient temperature and relative humidity).
- j. "Startup" shall be defined as the period between initial fuel light-off in the combustion turbine until the combustion turbine reaches normal or backup operations.
- k. "Shutdown" shall be defined as the period beginning when the combustion turbine leaves normal or backup operations until combustion has ceased.
- l. When burning natural gas, during startup/shutdown cycle, the following emission limits shall not be exceeded for this emission unit:

NOx = 30.0 lbs/ startup/shutdown cycle; and

CO = 275 lbs/ startup/shutdown cycle.
- m. When burning diesel fuel, during startup/shutdown cycle, the following emission limits shall not be exceeded for this emission unit:

NOx = 72.0 lbs/ startup/shutdown cycle; and

CO = 275 lbs/ startup/shutdown cycle.



c) Operational Restrictions

- (1) The permittee shall only burn natural gas in the duct burner portion of this emissions unit, and except as allowed in c)(3) of this permit, the permittee shall only burn natural gas in the combustion turbine portion of this emission unit. The maximum sulfur content of natural gas shall not exceed 2 grains per 100 standard cubic feet.

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

- (2) The sulfur content of the diesel fuel used in this combustion turbine shall not exceed 0.05 percent by weight.

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

- (3) The maximum annual operating hours while burning diesel fuel in the combustion turbines for emissions units P003 and P004 combined shall not exceed 576 hours, based upon a rolling, 12-month summation of the operating hours.

(Authority for term: OAC Rule 3745-77-07(A)(1), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (4) The maximum annual natural gas usage for the duct burners of emissions units P003 and P004 combined shall not exceed 1000 million standard cubic feet, based upon a rolling, 12-month summation of the natural gas usage figures.

(Authority for term: OAC Rule 3745-77-07(A)(1), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (5) Duct burners shall not operate during backup mode operation.

(Authority for term: OAC Rule 3745-77-07(A)(1), OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (6) The number of startup/shutdown cycles per year shall not exceed 480 cycles for emissions units P003 and P004 combined.

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

- (7) A startup/shutdown cycle shall not exceed a maximum total duration of 60 minutes.

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

- (8) The maximum annual heat input rate to the combustion turbines of emissions units P003 and P004 combined shall not exceed 2,354,400 mmBtu, based upon a rolling, 12-month summation of the fuel usage figures.

(Authority for term: OAC Rule 3745-77-07(A)(1), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (9) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the operational restrictions in this permit are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #14-05950, issued on June 12, 2008: c)(1) through c)(8). The operational restrictions contained in the above-referenced Permit to



Install are subsumed into the operational restrictions of this operating permit, so that compliance with these requirements constitutes compliance with the underlying operational restrictions in the Permit to Install.

(Authority for term: OAC Rule 3745-77-07(A)(3)(a)(ii))

d) Monitoring and/or Recordkeeping Requirements

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

- a. the emissions unit's actual electrical output for each operating hour; and
- b. for each day during which the permittee burns a fuel other than natural gas and/or diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

(2) The permittee shall maintain monthly records of the following information from emissions units P003 and P004, combined:

- a. The natural gas usage rate in the combustion turbines for each month (in standard cubic feet).
- b. The natural gas usage rate in the duct burners for each month (in standard cubic feet).
- c. The diesel fuel usage rate in the combustion turbines for each month (in gallons).
- d. The hours of operation of the combustion turbines.
- e. The hours of operation of the duct burners and the fuel used during those hours of operation.
- f. The hours of operation of the combustion turbines while burning diesel fuel.
- g. The number of startup/shutdown cycles for each month.
- h. The rolling, 12-month summation of the hours of operation of the combustion turbines while burning diesel fuel.
- i. The rolling, 12-month summation of the natural gas usage rate in the duct burner.
- j. The monthly emission rate for NO_x, CO, SO₂, PM/PM₁₀ and VOC, in tons.
- k. The rolling, 12-month summation of NO_x, CO, SO₂, PM/PM₁₀ and VOC, in tons.

(Authority for term: OAC Rule 3745-77-07(C)(1) and OAC Rule 3745-31-05(A)(3)), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D)))

(3) The rolling, 12-month summation of the actual heat input rate of the combustion turbine. The permittee shall maintain monthly records of the following information for this



emissions unit in order to monitor compliance with the startup and shutdown emission limitations and operational restrictions:

- a. the date and duration, in minutes, of each startup and shutdown cycle;
- b. the emissions, in pounds, for NO_x and CO when burning natural gas for each startup and shutdown cycle; and
- c. the emissions, in pounds, for NO_x and CO when burning diesel fuel for each startup and shutdown cycle

The permittee shall use the continuous NO_x and CO emissions monitoring data to determine the NO_x and CO emissions for these emissions units. During any period when the NO_x and/or the CO emissions monitoring systems are not operational, the permittee shall use the appropriate missing data procedures specified in 40 CFR Part 75 to determine NO_x and CO (although 40 CFR Part 75 pertains mainly to determining NO_x and SO₂ emissions and not to determining CO emissions, the permittee may use the same procedures allowed in 40 CFR Part 75 to determine NO_x emissions to determine CO emissions) emissions or an approved data substitution protocol. The data substitution values shall not be used to demonstrate compliance with the hourly NO_x and CO emission limitations applicable during normal or backup operation of this emissions unit.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG and OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

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

The permittee shall collect or require the diesel fuel supplier to collect a representative grab sample for each shipment of diesel fuel that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240, D4294, D6010), or equivalent methods as approved by the Director.

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

- (5) Continuous NO_x Monitoring - Certified Systems Statement of Certification

Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 or 40 CFR Part 75 (The permittee may use 40 CFR Part 75 continuous emissions



monitoring systems (CEMS) methodology using fuel flow monitors in conjunction with CEMS data to determine NO_x mass emissions if it is done in accordance with the provisions listed 40 CFR Part 75) for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of such equipment pursuant to the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 2 and Performance Specification 6 or 40 CFR Part 75 if low mass emission criteria described in 40 CFR Part 75 have been met. When 40 CFR Part 75 CEMS methodology using fuel flow monitors in conjunction with CEMS data to determine mass emissions, the Relative Accuracy requirements of 40 CFR Part 60, Performance Specification 6 are still required to be met, although other requirements from this performance specification may not be required. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC Rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of the appropriate sections of ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 2, Performance Specification 6, and 40 CFR Part 75 where applicable.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 75, 40 CFR Part 60 Subpart GG and OAC rules 3745-31-10 through 3745-31-20))

- (6) The permittee shall operate and maintain existing equipment to continuously monitor and record NO_x from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements of the appropriate sections specified in 40 CFR Part 60.13. When 40 CFR Part 75 CEMS methodology using fuel flow monitors in conjunction with CEMS data for mass emissions determinations, fuel flow meters shall meet the requirements of 40 CFR Part 75, Appendix D, Sections 2.1.2 and 2.1.5.

Data necessary for mass emission calculations per 40 CFR Part 75, Appendix D shall be recorded.

The permittee shall maintain records of all data obtained by the continuous NO_x monitoring system including, but not limited to, parts per million NO_x on an instantaneous (one-minute) basis, emissions of NO_x in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

During any period when the continuous NO_x emission monitoring systems are not operational, the permittee shall use the appropriate missing data procedures specified in 40 CFR Part 75 to determine the NO_x emissions.



(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, 40 CFR Part 60 Subpart GG and OAC rules 3745-31-10 through 3745-31-20))

(7) Continuous CO Monitoring - Certified Systems Statement of Certification

Prior to the installation of the continuous CO monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6, or 40 CFR Part 75 (The permittee may use 40 CFR Part 75 CEMS methodology using fuel flow monitors in conjunction with CEMS data to determine CO mass emissions if it is done in a manner consistent with NO_x mass emissions determinations as allowed in 40 CFR Part 75) for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of the continuous CO monitoring system pursuant to ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 4A and Performance Specification 6. If 40 CFR Part 75 CEMS methodology using fuel flow monitors in conjunction with CEMS data to determine mass emissions, the Relative Accuracy requirements of 40 CFR Part 60, Performance Specification 6 are still required to be met, although other requirements from this performance specification may not be required. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC Rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 4A and Performance Specification 6.

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, 40 CFR Part 60 Subpart GG and OAC Rule 3745-31-05(A)(3))

(8) The permittee shall operate and maintain equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13. When 40 CFR Part 75 CEMS methodology using fuel flow monitors in conjunction with CEMS data to determine mass emissions, fuel flow meters shall meet the requirements of 40 CFR Part 75, Appendix D, Sections 2.1.2 and 2.1.5.



Data necessary for mass emission calculations per 40 CFR Part 75, Appendix D shall be recorded. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, parts per million CO on an instantaneous (one minute) basis, emissions of CO in units of the applicable standard in the appropriate averaging period (e.g., hourly, hourly rolling, 3-hour, daily, 30-day rolling, annual, etc.), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendix B, 40 CFR Part 60 Subpart GG and OAC Rule 3745-31-05(A)(3))

(9) Continuous O₂ or CO₂ Monitoring - Certified Systems Statement of Certification

Prior to the installation of the continuous O₂ monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 3 for approval by the Ohio EPA, Central Office.

Within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit, the permittee shall conduct certification tests of such equipment pursuant to the appropriate sections of ORC section 3704.03(I), and 40 CFR Part 60, Appendix B, Performance Specification 3. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC Rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous O₂ monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of the appropriate sections of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 3.

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous O₂ monitoring system designed to ensure continuous valid and representative readings of O₂. The plan shall follow the requirements of the appropriate sections of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous O₂ monitoring system must be kept on site and available for inspection during regular office hours.

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of the appropriate sections of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B, Section 1.3 for fuel flow monitors. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

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



- (10) The permittee shall operate and maintain equipment to continuously monitor and record O₂ from this emissions unit in percent O₂. Such continuous monitoring and recording equipment shall comply with the requirements in the appropriate sections specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous O₂ monitoring system including, but not limited to, percent O₂ on an instantaneous (one-minute) basis, emissions of O₂ results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

- (11) The permittee shall maintain hourly records of the following information for this emissions unit:

- a. In lb(s)/hr emissions rate for NO_x and CO as obtained from d)(6) and d)(8), and NO_x ppmvd@15% O₂ as obtained from d)(6) based upon an hourly averaging period as allowed in the appropriate sections of 40 CFR Part 60.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendices B & F, 40 CFR Part 60 Subpart GG, OAC rules 3745-31-10 through 3745-31-20) and OAC 3745-31-05(D))

- (12) The permittee maintain records demonstrating that the natural gas fired in this emission unit meets the definition of natural gas in 40 CFR 60.331(u). The permittee shall use one of the following sources of information to make the required demonstration:

- a. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content if the fuel is 2.0 grains/100 scf or less; or
- b. Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 2.0 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR 75 is required.

(Authority for term: OAC Rule 3745-77-07(C)(1) and OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (13) The permittee shall use one of the total sulfur sampling options and the associated sampling frequency as described in sections 2.2.3 of appendix D to 40 CFR 75 (i.e. flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with the fuel oil already in the intended storage tank).

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 75, Appendix D, 40 CFR Part 60 Subpart GG, and OAC Rule 3745-31-05(A)(3))

- (14) The permittee shall maintain documentation on the sulfur contents of the fuels as required in 40 CFR 60.334(h)(3) and (i).



(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60.334(h)(3) and (i), 40 CFR Part 60 Subpart GG, and OAC Rule 3745-31-05(A)(3))

- (15) The permittee shall perform weekly checks, when this emissions unit is in operation, during daylight hours, and when weather conditions allow, for any visible particulate emissions from the stack/stacks serving this/these emissions unit(s). The presence or absence of any visible emissions shall be noted in an operation log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and,
 - e. any corrective actions taken to eliminate the visible emissions.

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

- (16) The permittee shall maintain daily records of the natural gas usage rate in the duct burner.

(Authority for term: OAC Rule 3745-77-07(C)(1), OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D) and 40 CFR 60 Subpart Dc)

- (17) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements in this permit are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #14-05950, issued on June 12, 2008: d)(1) through d)(16). 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.

(Authority for term: 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 diesel fuel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurred.

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

- (2) The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation while burning diesel fuel in the combustion turbines of emissions units P003 and P004. These reports are due by the date described in the Standard Terms and Conditions of this permit.



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

- (3) The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month actual heat input limitation to the combustion turbine; the rolling, 12-month natural gas usage limitation for the duct burners for emissions units P003 and P004. These reports are due by the date described in the Standard Terms and Conditions of this permit.

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

- (4) The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide limitation specified in c)(2) of this permit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

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

- (5) Pursuant to OAC Rules 3745-15-04, and ORC sections 3704.03(l) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), 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 the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NO_x values in excess of the applicable limits specified in 40 CFR Part 76 and any limitations specified in the terms and conditions of this permit or variance. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons).

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 any continuous NO_x monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

Pursuant to OAC Rules 3745-15-04, and ORC sections 3704.03(l) and 3704.031, the permittee shall submit a summary of the excess emission reports pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.



(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 60.7 and 60.13, and OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (6) Pursuant to OAC Rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), 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 the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any applicable limitation(s) specified in OAC Chapter 3745-21, 40 CFR Part 60, or any limitation(s) specified in the terms and conditions of this permit, in units of the standard. These reports shall also contain the total CO emissions for the calendar quarter (in tons).

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 any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

Pursuant to OAC Rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission reports pursuant to 40 CFR Part 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 60.7 and 60.13, and OAC Rule 3745-31-05(A)(3))

- (7) Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of continuous O₂ monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report. These quarterly



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

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 60.7 and 60.13, and OAC Rule 3745-31-05(A)(3))

- (8) The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 2 grains per standard 100 cubic foot. These reports are due by the date described in the Standard Terms and Conditions of this permit.

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

- (9) In lieu of the excess emissions reports required under 40 CFR Part 60.334, the permittee shall submit excess emissions reports for emissions unit P003 in accordance with this permit.

(Authority for term: OAC Rule 3745-77-07(C)(1) and Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D)

- (10) The permittee shall submit semiannual written reports which (a) identify all weeks during which any visible particulate emissions were observed from the stack serving these emissions units and (b) if needed describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Hamilton County Department of Environmental Services by January 31 and July 31 of each year and shall cover the previous 6 calendar month period.

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

- (11) The permittee shall submit annual reports which specify the total NO_x, SO₂, OC, PM/PM₁₀ and CO emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year. The CAA, Title V Fee Emission Report (FER) required to be submitted annually by April 15 for the facility will also satisfy the emission reporting requirement of this condition.

(Authority for term: OAC Rule 3745-77-07(C)(1), Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D)

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

Pursuant to 40 CFR Part 60.7, the permittee is hereby advised of the requirement to report the following at the appropriate times:

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



d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Hamilton County Department of Environmental Services

250 William Howard Taft Rd.

Cincinnati, Ohio 45219

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR Part 60.7, and OAC Rule 3745-31-05(A)(3) OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

(13) The permittee shall submit deviation (excursion) reports which identify all exceedances of the NOx and CO emissions limitations for each startup/shutdown cycle as specified in b)(2)l. and b)(2)m.

(Authority for term: OAC Rule 3745-77-07(C)(1), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

(14) The permittee shall submit deviation (excursion) reports which identify all exceedances of the number of startup/shutdown cycles limit in c)(6) or the startup/shutdown duration limit in c)(7).

(Authority for term: OAC Rule 3745-77-07(C)(1), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

(15) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the reporting requirements in this permit are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #14-05950, issued on June 12, 2008: d)(1) through d)(14). The reporting 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 reporting requirements in the Permit to Install.

(Authority for term: OAC Rule 3745-77-07(A)(3)(a)(ii))

f) Testing Requirements

(1) Compliance with the allowable emission limitations in b)(1) of this permit shall be determined according to the following methods:

a. NOx Emission Limitations:

See b)(1).

Applicable Compliance Method:

Initial compliance with the allowable outlet concentration, and the lbs/hr emission limitations shall be demonstrated by test results from the most recent compliance demonstration, and continual compliance with those limitations shall be demonstrated by the use of the CEM in condition d)(6) based upon an hourly



averaging period. Compliance with the annual emission limitation shall be determined by the record keeping required in condition d)(2).

(Authority for term: OAC Rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendices B & F, 40 CFR Part 60 Subpart GG and OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

b. PM Emission Limitations:

See b)(1).

Applicable Compliance Method:

Compliance with the lbs/hr emission limitations shall be demonstrated by test results from the most recent compliance demonstration. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

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

c. SO2 Emission Limitation:

See b)(1).

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by the record keeping required in d)(2), d)(4), d)(13), and d)(14). If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

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

d. OC Emission Limitations:

See b)(1).

Applicable Compliance Method:

Compliance with the lbs/hr limitations shall be demonstrated by test results from the most recent compliance demonstration. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual annual hours of operation and dividing by 2000 lbs/ton.

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



e. CO Emission Limitations:

See b)(1).

Applicable Compliance Method:

Initial compliance with the lbs/hr emission limitations shall be demonstrated by test results from the most recent compliance demonstration, and continual compliance with those limitations shall be demonstrated by the use of the CEM in condition d)(8) based upon an hourly averaging period. Compliance with the annual emission limitation shall be determined by the record keeping required in condition d)(2).

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

f. Visible Emissions Limitation:

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

Applicable Compliance Method:

Compliance with the visible emission limitation established by this permit shall be determined by Method 9, 40 CFR Part 60 Appendix A.

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

g. Benzene Emission Limitation:

See b)(1).

Applicable Compliance Method:

Compliance with the TPY emission limitation shall be demonstrated by using the AP-42 emission factors and estimated destruction efficiencies.

(Authority for term: OAC Rule 3745-77-07(C)(1), and OAC rules 3745-31-10 through 3745-31-20)

(2) Emission Limitation:

0.05 percent sulfur by weight for the diesel fuel.

Applicable Compliance Method:

When firing diesel fuel, except as provided below, compliance with the allowable SO2 emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of diesel fuel received during a calendar month meets the limitation.

If required, the permittee shall demonstrate compliance with this emission limitation (when firing diesel fuel) in accordance with 40 CFR, Part 60, Appendix A, Method 6C.



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

- (3) Compliance with the hours of operation limitation when burning diesel fuel in the combustion turbine shall be demonstrated by the record keeping in d)(2).

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

- (4) Compliance with the natural gas usage limitation for the duct burner shall be demonstrated by the record keeping in d)(2).

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

- (5) Compliance with the emission limitations in b)(2)l. and b)(2)m. shall be demonstrated by the monitoring and record keeping required in d)(3).

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

- (6) Compliance with the limitation in c)(6) shall be demonstrated by the monitoring and record keeping required in d)(2)g.

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

- (7) Compliance with the operational restriction in c)(7) shall be demonstrated by the monitoring and record keeping required in d)(3).

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

- (8) Compliance with the annual heat input operational restriction in c)(8) shall be demonstrated by the monitoring and record keeping required in d)(2)l.

(Authority for term: OAC Rule 3745-77-07(C)(1), OAC Rule 3745-31-05(A)(3), OAC rules 3745-31-10 through 3745-31-20, and OAC Rule 3745-31-05(D))

- (9) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #14-05950, issued on June 12, 2008 f)(1)-f)(8). The testing requirements contained in the above-referenced Permit to install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

(Authority for term: OAC Rule 3745-77-07(A)(3)(a)(ii))

g) Miscellaneous Requirements

- (1) The terms and conditions in this Permit to install supersede the terms and conditions with regard to emissions unit P003 and P004 in Permit to install 14-05108 as issued on August 15, 2002, and modified on August 25, 2005 and May 15, 2007 and Permit to Install #14-05950, issued on June 12, 2008.