John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

7/23/2013

Certified Mail

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

Chris Justice
Washington Energy Facility
Duke Energy Washington, LLC
P.O. Box 1329
Beverly, OH 45715-1329

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0684000212
Permit Number: P0110193
Permit Type: Administrative Modification
County: Washington

Dear Permit Holder:

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

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

How to appeal this permit

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

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

How to save money, reduce pollution and reduce energy consumption

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

How to give us feedback on your permitting experience

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

How to get an electronic copy of your permit

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

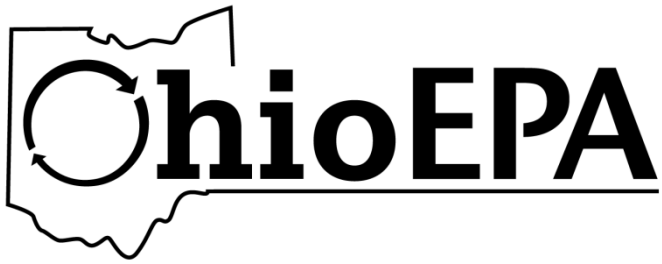
If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA
Ohio EPA-SEDO; Pennsylvania; West Virginia



FINAL

Division of Air Pollution Control
Permit-to-Install
for
Washington Energy Facility

Facility ID:	0684000212
Permit Number:	P0110193
Permit Type:	Administrative Modification
Issued:	7/23/2013
Effective:	7/23/2013

Division of Air Pollution Control
Permit-to-Install
for
Washington Energy Facility

Table of Contents

Authorization

Facility ID:	0684000212
Facility Description:	Natural gas fired combined cycle power plant.
Application Number(s):	A0044520
Permit Number:	P0110193
Permit Description:	This is an administrative modification of PTI 06-06792 to remove the hour limitation for duct burner operation.
Permit Type:	Administrative Modification
Permit Fee:	$1,000.00
Issue Date:	7/23/2013
Effective Date:	7/23/2013

This document constitutes issuance to:

Washington Energy Facility
Duke Energy Washington, LLC
859 Ohio 83
Beverly, OH 45715-1329

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

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

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138
(740)385-8501

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0110193
Permit Description: This is an administrative modification of PTI 06-06792 to remove the hour limitation for duct burner operation.

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

Emissions Unit ID:	**P001**
Company Equipment ID:	CT #1
Superseded Permit Number:	06-06792
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	CT #2
Superseded Permit Number:	06-06792
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

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

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

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

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

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

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

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

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

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

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

2. Severability Clause

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

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

3. General Requirements

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

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

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

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

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

4. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

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

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

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

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

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

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

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

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

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

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

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

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

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

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

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

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

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

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have

been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southeast District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

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

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

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

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

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

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

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

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

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

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

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

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

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

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

   a) None.

2. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart GG: P001 and P002. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http:ecfr.gpoacess.gov or by contacting the appropriate Ohio EPA District Office or local air agency.

3. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart Da: P001 and P002. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http:ecfr.gpoacess.gov or by contacting the appropriate Ohio EPA District Office or local air agency.

4. The following emissions units are also being installed as part of this project:

Emissions Unit	BACT	Emissions
600 kW Emergency Diesel Fuel-Fired Generator*	Use of low sulfur fuel; Combustion control	3.1 TPY NOx 0.10 TPY SO_s 0.18 TPY PE 3.8 TPY CO 0.44 TPY VOC
400 HP Emergency Diesel Fuel-Fired Fire Pump Engine*	Use of low sulfur fuel; Combustion control	3.2 TPY NOx 0.21 TPY SO_s 0.22 TPY PE 0.69 TPY CO 0.26 TPY VOC
Four 4-cell Inlet Air Chiller Cooling Towers	Not Applicable	1.6 TPY PE

*Subject to OAC rule 3745-31-03(A)(4); restricted to no more than 500 hours per 12-month rolling period.

5. The permittee shall ensure that any CAIR NOx, SO2, or NOx ozone season units complies with the requirements of OAC 3745-109, which includes submitting timely permit applications. The permittee shall ensure that the affected emissions units comply with those requirements as outlined in the permit application submitted as required by OAC rules 3745-109-03, 109-10 and 109-16 for the affected emissions units.6. The permittee shall also comply with any subsequent federally mandated programs that may replace the CAIR program affecting electric generating facilities.

7. Clean Air Interstate Rule – OAC Chapter 3745-109.

   P001 – 170 MW combined cycle combustion turbine;
   P002 – 170 MW combined cycle combustion turbine:

   Note: Ohio EPA DAPC has completed rule amendments for OAC Chapter 3745-14, specifically, OAC rule 3745-14-01 and OAC rule 3745-14-06, which facilitated the transition of the affected units from OAC Chapter 3745-14 into the federal Clean Air Interstate Rule (CAIR) program which began with the 2009

control periods. This began the process of “sunsetting” the parts of OAC Chapter 3745-14 which were no longer needed as a result of Ohio’s CAIR rules (OAC Chapter 3745-109).

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group – Natural Gas Fired Combustion Turbines: P001, P002,

EU ID	Operations, Property and/or Equipment Description
P001	170 MW GE 7FA Natural Gas Fired Dry Low NOx (DLN) Combustion Turbine No. 1 with selective catalytic reduction. (Administrative modification to PTI 06-06792 issued on 08/14/2003 to remove the duct burner hour limitation).
P002	170 MW GE 7FA Natural Gas Fired Dry Low NOx (DLN) Combustion Turbine No. 2 with selective catalytic reduction. (Administrative modification to PTI 06-06792 issued on 08/14/2003 to remove the duct burner hour limitation).

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) d)(9), e(8), g)(1), g)(2), and g)(3)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #06-6792 as issued 08/14/2003)	**EMISSION LIMITS WITHOUT DUCT BURNER FIRING** Ammonia (NH_3) emissions shall not exceed 26.6lbs/hr. Formaldehyde emissions shall not exceed 0.8 lb/hr. **EMISSION LIMITS WITH DUCT BURNER FIRING** Ammonia (NH_3) emissions shall not exceed 28.1 lbs/hr. Formaldehyde emissions shall not exceed 0.82 lb/hr. NH_3 emissions shall not exceed 123.1 tons/yr.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Formaldehyde emissions shall not exceed 3.6 tons/yr. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subparts Da and GG, and OAC rules 3745-31-10 through 20. See c)(1).
b.	OAC rules 3745-31-10 through 3745-31-20	**EMISSION LIMITS WITHOUT DUCT BURNER FIRING** Nitrogen Oxides (NOx) emissions shall not exceed 3.0ppmvd at 15% oxygen based on a 3-hour block averaging period and 24.7lbs/hr. Particulate matter (PM) and particulate matter emissions with a diameter less than 10 microns (PM10)shall not exceed 19.0lbs/hr. Sulfur dioxide (SO_2) emissions shall not exceed 1.52 lbs/hr. Carbon monoxide (CO) emissions shall not exceed 8 ppmvd at 15% oxygen based on a 24-hour block averaging period and 43.0lbs/hr. Volatile organic compounds (VOC) emissions shall not exceed 3.0lbs/hr. Sulfuric acid emissions shall not exceed 0.23 lbs/hr. Visible particle emissions from any stack shall not exceed 10% opacity as a 6-minute average. **EMISSION LIMITS WITH DUCT BURNER FIRING** Nitrogen Oxides (NO_x) emissions shall not exceed 3.0 ppmvd at 15% oxygen based on a 3-hour block averaging period and 28.6 lbs/hr.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		PM/PM_{10} shall not exceed 23.4lbs/hr. Sulfur dioxide (SO_2) emissions shall not exceed 1.52lbs/hr. Carbon monoxide (CO) emissions shall not exceed 8 ppmvd at 15% oxygen based on a 24-hour block averaging period and 45.9lbs/hr. Volatile organic compounds (VOC) emissions shall not exceed 7.3lbs/hr. Sulfuric acid emissions shall not exceed 0.23lb/hr. Visible PE from any stack shall not exceed 10% opacity as a 6-minute average. NO_x emissions shall not exceed 157.5 tons per rolling, 12-monthperiod; including start-up and shutdown emissions. SO_2 emissions shall not exceed 6.7tons per rolling, 12-monthperiod. PM/PM_{10}emissions shall not exceed 102.5tons per rolling, 12-monthperiod. CO emissions shall not exceed 453.7tons per rolling, 12-monthperiod, including start-up and shutdown emissions. CO emissions during steady –state operation (Mode 6) shall not exceed 201.0 tons per rolling, 12-month period (excludes start-up and shutdown emissions). VOC emissions shall not exceed 63.1tons per rolling, 12-monthperiod, including start-up and shutdown emissions. Sulfuric Acid emissions shall not exceed 1.0 tonsper rolling, 12-month period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	40 CFR Part 60, Subpart Da, OAC rule 3745-18-06(F), and OAC rule 3745-17-11(B)(4) OAC rule 3745-17-07(A)	See b)(2)a.
d.	40 CFR Part 60, Subpart GG	See b)(2)a.

(2) Additional Terms and Conditions

a. The emission limitation required by this applicable rule is equivalent to or less stringent than the emission limitation established pursuant to OAC rules 3745-31-05(A)(3).

b. If the permittee is subject to the requirements of OAC chapter 103 and 40 CFR Parts 72 and 75 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.

c. As part of the Best Available Control Technology (BACT) determination for NO_x, the permittee shall install and maintain dry low NO_x burners, and a selective catalytic reduction (SCR) system on this emissions unit. Operation of these control systems shall reduce emissions to the NO_x limitations specified in b)(1)b.

d. As part of the Best Available Control Technology (BACT) determination for CO, the permittee shall operate the emissions unit in accordance with good combustion practices as recommended by the manufacturer to the CO limitations specified in b)(1)b.

e. As part of the Best Available Control Technology (BACT) determination for PM/PM_{10} and SO_2, the permittee shall only use natural gas (as specified in c)(1)) in this emissions unit.

f. As part of the Best Available Control Technology (BACT) determination for VOC, the permittee shall operate the emissions unit in accordance with good combustion practices as recommended by the manufacturer.

c) Operational Restrictions

(1) The permittee shall burn only pipeline quality natural gas in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 0.5 grains per 100 standard cubic feet.

(2) Startup shall be defined as the period between when the combustion turbine is initially started until the combustion turbine achieves combustion operational Mode 6. Shutdown shall be defined as the period beginning when the combustion turbine leaves operational Mode 6 and ending when combustion has ceased. Mode 6 is defined by the

manufacturer as the low emissions mode during which all 6 of the burner nozzles are in use, burning a lean premixed gas for steady-state operation (i.e., in compliance with the NO_x and CO lbs/hr emission limitations listed in b)(1) above). The continuous emission monitoring system will indicate and record the combustion turbine operational mode, including when the emissions unit is shut down and when operating in start-up and shutdown modes. This system will also be used to demonstrate compliance with the NO_x and CO emissions limitations during steady-state operation (Mode 6) and startups/shutdowns.

Startups shall not exceed 250 minutes in duration and shutdowns shall not exceed 120 minutes in duration. The total of all start-ups and shutdowns shall be limited to 260 cycles (each cycle consists of one start-up and one shutdown) per year.

Each startup and shutdown shall be limited to the following:

Pollutant	*Maximum Emission Rate (lbs/hr per turbine)*
NO_x	400
CO	1,658
VOC	94

Compliance with the above CO and NO_xlbs/hr startup and shutdown emission limitations shall be demonstrated using the continuous emissions monitoring system based on a 1-hour block average. Compliance with the VOC lbs/hr startup and shutdown emission limitation shall be demonstrated through the record keeping requirements specified in section d) of this permit.

(3) Except during periods of startup, the SCR for this emissions unit shall be in operation at all times including periods of shutdown mode of the unit.

(4) This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the emissions upon issuance of this permit.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information for this emissions unit:

a. the natural gas usage rate (in standard cubic feet);

b. the hours of operation of the combustion turbine;

c. the hours of operation of the duct burner;

d. the number of start-ups, and the duration, in minutes, of each start-up;

e. the number of shutdowns, and the duration, in minutes, of each shutdown;

f. the total number of start-up/shutdown cycles;

g. the NOx emissions, in tons, for each start-up/shutdown cycle based on the data collected and maintained in the DAHS, including data generated pursuant to the approved data substitution protocol;

h. The CO emissions, in tons, for each start-up/shutdown cycle based on the data collected and maintained in the DAHS, including data generated pursuant to the approved data substitution protocol;

i. the VOC emissions, in tons, for each start-up/shutdown cycle, based on the emission factor of 94 pounds per hour;

j. the total NO_xemissionsduring steady-state operation (mode 6), in tons;

k. the total CO emissions during steady-state operation (mode 6), in tons;

l. the total CO emissions, in tons, including start-up/shutdown emissions;

m. the total VOC emissions, in tons, including start-up/shutdown emissions;

n. the total SO_2, PM/PM_{10}, NH_3, formaldehyde, and sulfuric acid emissions, in pounds;

o. the total NH_3, formaldehyde emissions, in tons;

p. the rolling, 12-month summation of the NO_x emissions, in tons, including start-up/shutdown emissions;

q. the rolling, 12-month summation of the steady-state (Mode 6) CO, in tons;

r. the rolling, 12-month summation of the total CO emissions, in tons, including start-up/shutdown emissions;

s. the rolling, 12-month summation of the VOC emissions, in tons, including start-up/shutdown emissions; and

t. the rolling, 12-month summation of the SO_2, PM/PM_{10}, and sulfuric acid emissions, in tons.

(2) The permittee shall operate and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in the 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 and/or 40 CFR Part 75.

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

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

b. emissions of NO_xin units established in this permit in the appropriate averaging period during Mode 6, and including start-up and shutdown;

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

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

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

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

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

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

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

In conjunction with the operation of the NO_x CEMS, the permittee shall operate and maintain a system to monitor when the duct burners are being fired. The data measured by this system shall be compiled with the data recorded by the NO_x CEMS.

* The installation and operation of systems to continuously monitor and record emissions of NO_x may be performed in lieu of monitoring the nitrogen content of the fuels being fired in the turbine, as required by 40 CFR 60.334(b).

[Authority for term: PTI 06-6792, OAC rule 3745-77-07(C)(1), 40 CFR 60.13, 40 CFR Part 60, Appendices B & F and 40 CFR Part 75]

(3) The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in the units established in this permit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75.

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

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

b. emissions of CO in units established in this permit in the appropriate averaging period during Mode 6, and including start-up and shutdown

c. results of quarterly cylinder gas audits;

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

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

f. hours of operation of the emissions unit, and continuous CO monitoring system;

g. the date, time, and hours of operation of the emissions unit without the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous CO monitoring system; as well as,

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

In conjunction with the operation of the CO CEMS, the permittee shall operate and maintain a system to monitor when the duct burners are being fired. The data measured by this system shall be compiled with the data recorded by the CO CEMS.

(4) The permittee shall operate and maintain equipment to continuously monitor and record O_2 emitted from this emissions unit in percent O_2. The continuous monitoring and recording equipment shall comply with the requirements specified 40 CFR Part 60.13 and/or 40 CFR Part 75.

The permittee shall maintain records of data obtained by the continuous O_2 monitoring system including, but not limited to:

a. percent O_2 on an instantaneous (one-minute) basis;

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

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

d. results of required relative accuracy test audit(s);

e. hours of operation of the emissions unit, continuous O_2 monitoring system;

f. the date, time, and hours of operation of the emissions unit without the continuous O_2 monitoring system;

g. the date, time, and hours of operation of the emissions unit during any malfunction of the continuous O_2 monitoring system; as well as,

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

(5) The permittee shall operate and maintain equipment to continuously monitor and record the actual fuel flow to this emissions unit when the emissions unit is in operation. Such

continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the approved data substitution protocol.

Fuel flow data that is substituted in accordance with 40 CFR Part 75, Appendix D, is not to be used when verifying compliance with the hourly NOx and CO pounds per hour emission limits. Hours in which fuel flow is substituted should be included as NOx and CO monitoring system downtime.

(6) The permittee shall monitor the sulfur content and gross calorific value of the fuel being fired in the combustion turbine and duct burner. In accordance with 40 CFR Part 60, Subpart GG, section 60.334 (h)(3), the permittee has demonstrated that the gaseous fuel meets the definition of natural gas in 40 CFR Part 60, Subpart GG, section 60.331(u). Therefore, fuel sampling and analysis shall be conducted according to the procedures and at the frequency specified by 40 CFR Part 75, Appendix D. Per 40 CFR Part 75, Appendix D section 2.3.1.4, the permittee has demonstrated that the gaseous fuel is pipeline natural gas. Therefore, ongoing sampling of the fuel's sulfur content is required annually and whenever the fuel supply sources change, and sampling and analysis of the fuels gross calorific value shall be sampled monthly.

(7) The permittee shall determine the hourly heat input rate to the combustion turbine and duct burner from the fuel flow rate as determined in d)(5) and gross calorific value as determined in d)(6). The heat input rate shall be calculated in accordance with the procedures in section 5 of 40 CFR Part 75, Appendix F.

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

(9) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

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

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

a. all records which show that the sulfur content of the natural gas exceeded 0.5 grains per 100 standard cubic feet;

b. all records which show that the start-up duration exceeded 250 minutes;

c. all records which show that the shutdown duration exceeded 120 minutes;

d. all records which show that the total number of start-up/shutdown cycles exceeded 260;

e. all exceedances of the NO_x, CO, and/or VOC start-up limitations; and

f. allexceedances of the rolling, 12-month NO_x, CO, VOC, SO_2, $H_2SO_4$and/or PM/PM_{10} emission limitations.

These quarterly reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

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

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

i. the facility name and address;

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

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

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above in section C.1.e)(3)a;

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

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

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

viii. results and dates of quarterly cylinder gas audits or linearity checks;

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

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

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

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

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

Each report shall address the operations conducted and data obtained during the previous calendar quarter. These reports shall also contain the total NO_x emissions for the calendar quarter (in tons), including all data collected during start-up and shutdown periods and all data generated pursuant to the missing data procedures specified in 40 CFR Part 75 and/or the approved data substitution protocol. Data substitution procedures from 40 CFR Part 75 are not to be used for showing compliance with the short term OAC 3745-31-05(A)(3) rule-based or NSPS-based limitation(s) in this permit.

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

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

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 report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Ohio EPA Southeast District Office within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

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

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, and any other applicable

rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

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

i. the facility name and address;

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

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

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above in section C.1.e)(4)a;

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

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

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

viii. results and dates of quarterly cylinder gas audits;

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

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

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

xii. the date, time, and duration of any downtime** of the continuous CO monitoring system while the emissions unit was in operation; and

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

Each report shall address the operations conducted and data obtained during the previous calendar quarter. These reports shall also contain the total CO emissions for the calendar quarter (in tons), including all data collected during start-up and shutdown periods and all data generated pursuant to the missing data procedures specified in 40

CFR Part 75 and/or the approved data substitution protocol. Data substitution procedures from 40 CFR Part 75 are not to be used for showing compliance with the short term OAC 3745-31-05(A)(3) rule-based or NSPS-based limitation(s) in this permit.

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

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

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 report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Ohio EPA Southeast District Office within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

(5) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous O_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of continuous O_2 monitoring system downtime and malfunction while the emissions unit was on line.

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

i. the facility name and address;

ii. the manufacturer and model number of the continuous O_2 and any other associated monitors if applicable;

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

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

v. the total operating time of the continuous O_2 monitoring system while the emissions unit was in operation;

vi. results and dates of quarterly cylinder gas audits or linearity checks;

vii. unless previously submitted, results and dates of the relative accuracy test audit(s) (during appropriate quarter(s));

viii. unless previously submitted, the results of any relative accuracy test audit showing the continuous O_2 monitor out-of-control and the compliant results following any corrective actions;

ix. the date, time, and duration of any/each malfunction* of the continuous O_2 monitoring system while the emissions unit was in operation;

x. the date, time, and duration of any downtime* of the continuous O_2 monitoring system while the emissions unit was in operation; and

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

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

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

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

(7) The permittee shall submit annual reports that specify the total NO_x, CO, PM/PM_{10}, SO_2, VOC, NH_3, formaldehyde, and sulfuric acid emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year.This reporting requirement may be satisfied by including and identifying the specific emission data for each combustion turbine, P001 and P002, in the annual Title V Fee Emissions Report

(8) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

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

a. Emission Limitations:

NO_x emissions shall not exceed:

3.0 ppmvd at 15% O_2 withor without duct burner firing (based on a 3-hour block averaging period);

24.7 lbs/hr without duct burner firing;
28.6lbs/hr with duct burner firing; and
157.5 tons per rolling, 12-month period, including startup/ shutdown emissions.

Applicable Compliance Method:

Ongoing compliance with these emission limitations during Mode 6 operation, as well as the annual emission limitations, including startup and shutdown emissions, shall be demonstrated based upon the NO_x and O_2 CEMS and record keeping requirements specified in this permit.

If required, nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

b. Emission Limitations:

PM/PM_{10} emissions shall not exceed:

19.0 lbs/hr without duct burner firing;
23.4lbs/hr with duct burner firing; and
102.5 tons per rolling, 12-month period.

Applicable Compliance Method:

Ongoing compliance with the lbs/hr emission limitation may be demonstrated through the record keeping requirements specified in this permit and the emissions unit specific PM/PM_{10} emission factors established during the emissions testing that demonstrated that the emissions unit was in compliance. Compliance with the tpy emission limitation shall be demonstrated by multiplying the tested hourly emission rate by the actual annual hours of operation, and then dividing by 2,000lbs/ton. The monthly emissions shall be added to the previous 11 months to determine the rolling, 12-month total emissions.

If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and 40 CFR Part 51, Appendix M, Method 202. Alternative USEPA-approved test methods may be used with prior approval by Ohio EPA.

c. Emission Limitations:

SO_2 emissions shall not exceed:

1.52lbs/hr with or without duct burner firing; and
6.7tons per rolling, 12-month period.

Applicable Compliance Methods:

Compliance with the hourly emission limitation with and without duct burning shall be determined by the record keeping required in condition d)(1), (2), and (7). Compliance with the annual emission limitation shall be determined by multiplying the hourly emission rate by the actual rolling, 12-month hours of operation both with and without the duct burner firing (as recorded in d)(2)), and dividing by 2,000lbs/ton.

If required, sulfur dioxide emissions shall be determined according to test Methods 1 - 4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emission Limitations:

VOC emissions shall not exceed:

3.0 lbs/hr without duct burner firing;
7.3lbs/hr with duct burner firing; and
63.1tons per rolling, 12-month period, including startup/ shutdown emissions.

Applicable Compliance Method:

Ongoing compliance with the lbs/hr emission limitations may be demonstrated through the record keeping requirements specified in this permit and the emissions unit specific VOC emission factors established during the emission testing that demonstrated that the emissions unit was in compliance.

Compliance with the tpy emission limitation, including startup and shut down emissions, shall be demonstrated by multiplying the appropriate hourly emission rate by the actual hours of operation, plus multiplying the hourly startup and shut down emission rate by the actual minutes of startup and shut down divided by 60 minutes/hour, and then dividing by 2,000lbs/ton. The monthly emissions shall be added to the previous 11 months to determine the rolling, 12-month total emissions.

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

e. Emission Limitations:

CO emissions shall not exceed:

8ppmvdat 15% O_2 withor without duct burner firing (based on a 24-hour block averaging period);

43.0 lbs/hr without duct burner firing;
45.9lbs/hr with duct burner firing; and
201.0 tons per rolling, 12-month period during steady-state (mode 6) operation (excludes start-up and shutdown emissions) and 453.7 tons per rolling, 12-month period, including start-up and shutdown emissions.

Applicable Compliance Method:

Ongoing compliance with these emission limitations during Mode 6 operation, as well as the annual emission limitations, including startup and shutdown emissions, may be demonstrated based upon the CO and O_2 CEMS and the record keeping requirements specified in this permit.

If required, carbon monoxide emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

f. Emission Limitations:

NH_3 emissions shall not exceed:

26.6 lbs/hr without duct burner firing:
28.1lbs/hr with duct burner firing; and
123.1tons per year.

Applicable Compliance Method:

Ongoing compliance with the lbs/hr emission limitations may be demonstrated through the record keeping requirements specified in this permit and the emissions unit specific NH_3 emission factors established during the emission testing that demonstrated that the emissions unit was in compliance. Compliance with the tpy emission limitation shall be demonstrated by multiplying the hourly emission rate by the actual annual hours of operation, and then dividing by 2,000lbs/ton.

g. If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing performed in accordance with CTM-027 or other USEPA-approved methods.Emission Limitations:
Formaldehyde emissions shall not exceed:
0.82lb/hr with or without duct burner firing; and
3.6tons per year.

Applicable Compliance Method:

Ongoing compliance with the lbs/hr emission limitations may be demonstrated through the record keeping requirements specified in this permit and the emissions unit specific formaldehyde emission factors established during the emission testing that demonstrated that the emissions unit was in compliance.

Compliance with the tpy emission limitation shall be demonstrated by multiplying the hourly emission rate by the actual annual hours of operation, and then dividing by 2,000lbs/ton.

If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing performed in accordance with SW-846 Method 0011 or EPA Method 316 or other USEPA-approved methods.

h. Emission Limitations:

Sulfuric acid emissions shall not exceed:

0.23lbs/hr with or without duct burner firing; and
1.0tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lbs/hr emission limitation may be demonstrated by multiplying the emission factor of 0.00009 lb/mmBtu (supplied by permittee) by the maximum heat input. Compliance with the tpy emission limitation shall be demonstrated based upon the record keeping requirements specified in this permit.

If required, the permittee shall demonstrate compliance by emission testing in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 8.

i. Emission Limitation:

Visible particulate emissions from any stack shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

g) Miscellaneous Requirements

(1) Initial compliance testing for NOx, PM, VOC, CO, NH_3, Formaldehyde, and visual opacity was performed in July, 2000, as established in PTI #06-6792, issued final 08/14/2003,

(2) The emission limitations specified in this permit were established using the Ohio EPA's "Air Toxic Policy" and are based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model (or other Ohio EPA approved model) and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling:

Pollutant: Formaldehyde

TLV (ug/m3): 273 (Converted from the STEL)
Maximum Hourly Emission Rate (lbs/hr): 1.64*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.04
MAGLC (ug/m3): 6.5

Pollutant: Sulfuric Acid
TLV (ug/m3): 1,000
Maximum Hourly Emission Rate (lbs/hr): 4.4*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 4.07
MAGLC (ug/m3): 23.8

Pollutant: Ammonia
TLV (ug/m3): 17,000
Maximum Hourly Emission Rate (lbs/hr): 69.2*
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 21.5
MAGLC (ug/m3): 404.8

* This was modeled for emissions units P001 & P002 combined.

(3) OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a “modification” as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a “modification”:

a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;

b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an “allowable” emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);

c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,

d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

(4) The Ohio EPA will not consider any of the above-mentioned as a “modification” requiring a permit to install, if the following conditions are met:

a. the change is not otherwise considered a “modification” under OAC Chapter 3745-31;

b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,

c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

(5) In accordance with good engineering practices, the SCR unit(s) shall be operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee. The permittee shall maintain on site a copy of the operation and maintenance manual, as provided by the manufacturer.

(6) The permittee shall maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system, designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard(s). The fuel flow monitor/meter shall be maintained as required in Part 75, Appendix D. Except as allowed below, the plan shall follow the requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct relative accuracy test audits for the continuous NO_xmonitoring system in accordance with the frequencies required pursuant to 40 CFR Part 60 and 40 CFR Part 75; or may follow relative accuracy test audit frequency requirements for monitoring systems subject to 40 CFR 75, Appendix B, in lieu of frequencies required in 40 CFR Part 60. In either case, results shall be recorded and reported in units of the applicable standard(s) in accordance with 40 CFR Part 60.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits pursuant to 40 CFR Part 60, and linearity checks pursuant to 40 CFR Part 75; however, linearity checks completed pursuant to 40 CFR Part 75, Appendix B, may be substituted for the quarterly cylinder gas or relative accuracy audits required per 40 CFR Part 60.

(7) The permittee shall maintain a written quality assurance/quality control plan for the continuous CO monitoring system, designed to ensure continuous valid and representative readings of CO emissions in units of the applicable standard(s). Except as allowed below, 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.

The plan shall include the requirement to conduct relative accuracy test audits for the continuous CO monitoring system in accordance with the frequencies required for monitoring systems subject to 40 CFR 60, or may follow relative accuracy test audit frequency requirements for monitoring systems subject to 40 CFR 75, Appendix B. In

either case, results shall be recorded and reported in units of the applicable standard(s) in accordance with 40 CFR Part 60.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; however, the quarterly cylinder gas audit and relative accuracy audit frequency requirements may be adjusted to coincide with linearity checks completed for continuous emissions monitoring systems subject to 40 CFR Part 75, Appendix B requirements.

(8) The permittee shall maintain a written quality assurance/quality control plan for the continuous O_2 monitoring system, designed to ensure continuous valid and representative readings of O_2 emissions in units of the applicable standard(s). Except as allowed below, the plan shall follow the requirements of 40 CFR Part 60, Appendix F and 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous O_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct relative accuracy test audits for the continuous O_2 monitoring system in accordance with the frequencies required pursuant to 40 CFR Part 60 and 40 CFR Part 75; or may follow relative accuracy test audit frequency requirements for monitoring systems subject to 40 CFR 75, Appendix B, in lieu of frequencies required in 40 CFR Part 60. In either case, results shall be recorded and reported in units of the applicable standard(s) in accordance with 40 CFR Part 60.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits pursuant to 40 CFR Part 60, and linearity checks pursuant to 40 CFR Part 75; however, linearity checks completed pursuant to 40 CFR Part 75, Appendix B, may be substituted for the quarterly cylinder gas or relative accuracy audits required per 40 CFR Part 60.