Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

3/13/2012

Pamela Blakley *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.

Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: AMP Fremont Energy Center
Facility ID: 0372030241
Permit Type: Initial
Permit Number: P0109022

Dear Ms. Blakley:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. 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. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-3631 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA DAPC, Northwest District Office

50 West Town Street, Suite 700
P.O. Box 1049
Columbus, OH 43216-1049

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614 | 644 3184 (fax)
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Ohio | Environmental Protection Agency

PROPOSED

Division of Air Pollution Control
Title V Permit
for
AMP Fremont Energy Center

Facility ID:	0372030241
Permit Number:	P0109022
Permit Type:	Initial
Issued:	3/13/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
AMP Fremont Energy Center

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Authorization

Facility ID:	0372030241
Facility Description:	Combined Cycle Electric Generating Facility
Application Number(s):	A0042748
Permit Number:	P0109022
Permit Description:	Initial Title V operating permit for a combined cycle electric generating facility. This permit includes three combined cycle turbines with duct burners (emissions units P001, P002 and P003).
Permit Type:	Initial
Issue Date:	3/13/2012
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Superseded Permit Number:	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:

AMP Fremont Energy Center
1275 County Road 138
Fremont, OH 43420

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

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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 Ohio EPA DAPC, Northwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

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

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

c) The permittee shall submit required reports in the following manner:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Northwest District Office.

(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 contaminent 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 RequirementsUnder 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 RequirementsUnder 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.

B. Facility-Wide Terms and Conditions

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

   a) None.

2. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21, 3745-31, and/or 40 CFR Part 60 or 63:

   a) P004 - Firefighting Diesel water pump (PBR07762)

   b) P005 - Emergency Diesel Generator (PBR07761)

C. Emissions Unit Terms and Conditions

1. P001, Combined Cycle Turbine 1 and Duct Burner

Operations, Property and/or Equipment Description:

Combined Cycle Turbine & 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) [P0109021, issued 11/21/11]	Visible particulate emissions (PE) shall not exceed 10 percent opacity as a six-minute average. <u>Allowable emissions rates without duct burners firing (and with duct burners firing)</u> 3.5 ppmvd nitrogen oxides (NO_x) at 15% oxygen, 27.6 lbsNO_x/hr (35.9 lbsNO_x/hr) 5.0 ppmvd carbon monoxide (CO) at 15% oxygen (25.0 ppmvd CO at 15% oxygen), 23.0 lbs CO/hr (139.5 lbs CO/hr) [see b(2)j.] 3.9 lbs volatile organic compounds (VOC)/hr (30.0 lbs VOC/hr) 0.0066 lbPE/MMBtu heat input (0.0091 lb PE/MMBtu heat input), 13.7 lbs PE/hr (24.7 lbs PE/hr) 0.0057 lb sulfur dioxide (SO_2)/MMBtu heat input, 11.9 lbs SO_2/hr (16.1 lbs SO_2/hr) 2.7 lbs sulfuric acid (H_2SO_4)/hr (3.7 lbs H_2SO_4/hr)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		1.23 lbs formaldehyde/hr (1.75 lbsformaldehyde/hr) and 7.2 tons formaldehyde/yr 23.7 lbs ammonia/hr (24.0 lbs ammonia/hr) and 97.8 tons ammonia/yr <u>Start-up and shut-down emissions</u> 67.3 tons NO_x/yr; 296.7 tons CO/yr; and 32.0 tons VOC/yr. See b)(2)b.
b.	40 CFR 52.21 OAC rules 3745-31-10 through3745-31-20 [P0109021, issued 11/21/11]	199.1 tons NO_xper rolling 12-month period; 607.7 tons CO per rolling 12-month period; 106.0 tons VOC per rolling 12-month period; 103.0 tons PE per rolling 12-month period; 65.8 tons SO_2per rolling 12-month period, and 15.1 tons H_2SO_4 per rolling 12-month period See b)(2)a. and b)(2)k.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
d.	40 CFR Part 60, Subpart GG	See b)(2)c., b)(2)l. through b)(2)n.
e.	40 CFR Part 60, Subpart Da	See b)(2)c.
f.	OAC rule 3745-18-06(F)	See b)(2)c.
g.	OAC rule 3745-17-11(B)(4)	See b)(2)c.
h.	OAC rule 3745-103	See b)(2)d.
i.	40 CFR Part 75	See b)(2)e., b)(2)f. and b)(2)g.

(2) Additional Terms and Conditions

a. The permittee shall employ Best Available Control Technology (BACT) for this emissions unit. BACT has been determined to be the following requirements for control of NO_x, SO_2, CO, PE/PM_{10}, H_2SO_4, and VOC emissions:

PE- Burning natural gas in an efficient combustion turbine. For this permit, it is assumed that all PE emissions are PM_{10}.

NO_x- Use of DLN burners and employment of SCR with a controlled rate of 3.5 ppmvd at 15% Oxygen.

CO- Use of an oxidation catalyst with a controlled rate of 5 ppmvd at 15% Oxygen at greater than 75% load.

VOC- Use of efficient combustion technology in the operation of the turbine with an indirect benefit from the oxidation catalyst.

SO_2- Burning natural gas in an efficient combustion turbine.

H_2SO_4- Burning natural gas in an efficient combustion turbine.

b. The requirements of this rule also include compliance with the requirements of 40 CFR 60 Subpart GG, 40 CFR 52.21, and OAC 3745-31-10 to 20.

c. The emission limitation specified by this rule is less stringent than the emission limit established pursuant to OAC rule 3745-31-05(A)(3).

d. The permittee is subject to the requirements of 40 CFR Part 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

e. The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system, designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The 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 NOx 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_x 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.

f. 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). 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. 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.

g. 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.

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

i. The information management system for this emissions unit shall be capable of monitoring and recording the fuel flow (million cu. ft.) and hours of operation with duct burner firing and without duct burner firing.

j. In addition to periods of duct firing, thecarbon monoxide emission limitations of 25.0 ppmvd at 15% oxygen and 139.5 lbs/hr includes the operational periods of 60%-75% load and use of power augmentation.

k. The annual emission limits above include 1080 hours of start-up and shut-down emissions. It has been determined that there are additional NO_x, CO, and VOC emissions associated with start-up and shut-down periods with estimated worst case emissions rates as described in condition d)(2).

l. In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR Part 60.334(h), the permittee shall install, operate, and maintain systems to continuously monitor and record emissions of NO_x from this emissions unit in accordance with the requirements specified in this permit.

m. 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 the requirements specified in this permit.

n. In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and continuous emissions monitoring requirements for this emissions unit in accordance with the requirements specified in this permit.

c) Operational Restrictions

(1) As specified in the permittee's PTI application, the maximum heat input rating of this emissions unit is 2812 MMBtu/hr. This value corresponds to a maximum natural gas fuel flow of 2.812 million scf/hr, with a lower heat value of 1000 MMBtu/million scf. The permittee shall operate this emissions unit within the parameters specified above, except for start-up* and shut-down. Start-up and shut-down periods shall be defined as any time the unit is operating at less than 60% load.

*Start-up for testing purposes shall be defined as the date when emission unit P001 is set in operation for any purpose. Start-up for the daily operation of the turbine is defined as any time the unit is operating at less than 60% load.

[OAC rule 3745-77-07(A)(1) and P0109021]

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

[OAC rule 3745-77-07(A)(1) and P0109021]

(3) The maximum sulfur content of the natural gas burned in this emissions unit shall not exceed 2 grains per 100 scf.

[OAC rule 3745-77-07(A)(1) and P0109021]

(4) The permittee shall be limited to 1080 hours of operation per year for start-ups and shut-downs for this emissions unit.

[OAC rule 3745-77-07(A)(1) and P0109021]

(5) During the first 12 month of operation following startup, the permittee shall be limited to the following emission limits for NO_x and CO (including start-up and shut-down emissions):

Month(s)	Maximum AllowableCumulative Emissions (tons)	
	NO_x	CO
1	35.0	100.0
1-2	70.0	200.0
1-3	105.0	300.0
1-4	140.0	400.0
1-5	175.0	500.0
1-12	199.1	607.7

After the first 12 calendar months of operation following startup, compliance with the annual emission limitation for NO_x and CO shall be based upon a rolling, 12-month summation of the NO_x and CO emissions.

[OAC rule 3745-77-07(A)(1) and P0109021]

d) Monitoring and/or Recordkeeping Requirements

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

a. number and duration of each cold and hot start-up;

b. number and duration of each shut-down;

c. the start-up and shut-down emissions for NO_x, CO, and VOC, in tons per month.

[OAC rule 3745-77-07(C)(1) and P0109021]

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

a. the natural gas usage rate for each month of operation, in scf/month;

b. the hours of operation for the turbine;

c. the hours of operation for the duct burner;

d. the emission rate* for PE, NO_x, SO_2, CO, VOC, formaldehyde, ammonia and H_2SO_4, for each month of operation, in tons/month;

e. the annual, year-to-date emissions of formaldehyde and ammonia, in tons;

f. the rolling, 12-month summation of the PE, SO_2, VOC and H_2SO_4 (including start-up and shut-down emissions) emissions, in tons.

g. during the first 12 calendar months of operation following startup, the cumulative emission rates for NO_x and CO (including start-up and shut-down emissions), in tons; and

h. beginning after the first 12 calendar months of operation following startup, the rolling 12-month summation of the NO_x and CO emissions (including start-up and shut-down emissions), in tons.

*The permittee shall use CEM data to determine emissions for those pollutants where a CEM is installed. During the periods where a CEM is not operational or for pollutants where a CEM is not installed, the permittee shall use the most recent testing data/emission factors available for each respective pollutant, including the following emission factors for cold (and hot) start-ups: 123 (129) lbsNO_x/hr, 451 (472) lbs CO/hr, and 41.4 (43.1) lbs VOC/hr; for shut-downs: 78 lbsNO_x/hr, 560 lbs CO/hr and 78 lbs VOC/hr.

[OAC rule 3745-77-07(C)(1) and P0109021]

(3) 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.

[OAC rule 3745-77-07(C)(1) and P0109021]

(4) Thepermittee shall maintain documentation on the sulfur contents and heating values of the fuels received. ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels. The permittee shall determine the heat value of the fuels using ASTM method D240. The applicable ranges of some ASTM methods mentions above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ration) may be used, subject to the approval of the Ohio EPA. The newest or most recent revisions to the applicable test method shall be used for these analyses.

Alternative, equivalent methods and frequencies of sampling schedules may be used if they comply with the requirements specified in 40 CFR Part 60.13, and upon written approval by the Ohio EPA.

[OAC rule 3745-77-07(C)(1) and P0109021]

(5) The permittee shall operate and maintain equipment to continuously monitor and record $NO_x$and CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and 40 CFR Part 75.

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

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

b. emissions of NO_x and CO in pounds per hour;

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 and CO 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 and/or CO 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 and/or 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).

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

[40 CFR 60.13; 40 CFR Part 60, Appendices B & F; 40 CFR Part 75; P0109021]

(6) The permittee may operate and maintain equipment to continuously monitor and record the fuel flow rate in order to stoichiometrically calculate emissions of NO_x and CO, in pounds per hour, as an alternative to conducting Specification 6. Fuel heat content values for each fuel burned, as applied in the stoichiometric calculations, shall also be recorded. The permittee shall maintain records of data obtained by the fuel flow monitor/meter, including the dates and results of each calibration check and the magnitude of calibration adjustments; periods of downtime and malfunction of the fuel flow monitor/meter; as well as, the reason (if known) and the corrective actions taken (if any) for each such event.

[40 CFR Part 75; P0109021]

(7) 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 in 40 CFR Parts 60 and Part 75.

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

a. the percent O_2 with each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits 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).

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

[40 CFR 60.13; 40 CFR Part 60, Appendices B & F; 40 CFR Part 75; P0109021]

(8) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2; the accuracy requirements of Performance Specification 6; and has been certified by U.S. EPA or recommended for certification by Ohio EPA to U.S. EPA under 40 CFR Part 75. The permittee shall document that the fuel flow monitor/meter meets 40 CFR 75 certification requirements prior to the performance specification test, and shall demonstrate how the pound per hour emissions of NOx is being calculated stoichiometrically. The letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[40 CFR 60.13; 40 CFR Part 60, Appendix B; 40 CFR Part 75; P0109021]

(9) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous carbon monoxide (CO) monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate), and the accuracy requirements of Specification 6. The permittee shall document that the fuel flow monitor/meter meets 40 CFR 75 certification requirements prior to the performance

specification test, and shall demonstrate how the pound per hour emissions of CO is being calculated stoichiometrically. The letter(s)/document(s) of certification under Part 60 shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[40 CFR 60.13; 40 CFR Part 60, Appendix B; P0109021]

(10) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O_2 monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3; and has been certified by U.S. EPA or recommended for certification by Ohio EPA to U.S. EPA under 40 CFR Part 75. The letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[40 CFR 60.13; 40 CFR Part 60, Appendix B; 40 CFR Part 75; P0109021]

e) Reporting Requirements

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

[OAC rule 3745-15-03(A)]

(2) The permittee shall submit deviation (excursion) reports that identify each day when afuel other than natural gas was burned in this emissions unit. Each report shall besubmitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07 (C)(1); P0109021]

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

a. any recordwhich shows that the sulfur content of the natural gas exceeded 2 gr/100 SCF;

b. all periods of timewhen this emissions unit was not in compliance with the start-up/shut-down requirements specified inc)(1);

c. any exceedance of the hours of operation restriction for start-ups and shutdowns specified in c)(4); and

d. allexceedances of the maximum allowable cumulative emission levels, for NO_x and CO, during the first 12-months of operation following startup specified in c)(5).

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

[OAC rule 3745-77-07 (C)(1); 40 CFR Part 60 Subpart GG and P0109021]

(4) 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, 40 CFR Parts 75 and 76, OAC Chapter 3745-14, 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;

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. 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. Data substitution procedures from 40 CFR 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

[40 CFR 60.7; 40 CFR Part 75; P0109021]

(5) 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, 40 CFR Part 60, 40 CFR Parts 75 and 76, 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;

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, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous CO 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. Data substitution procedures from 40 CFR 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

[40 CFR 60.7; 40 CFR Part 75; P0109021]

(6) 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 other associated monitors;

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

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

v. the total operating time of the continuous O_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

[40 CFR 60.7; 40 CFR Part 75; P0109021]

(7) If using the fuel flow rate to stoichiometrically calculate the pound per hour emissions of NO_x and CO, in place of Specification 6 requirements, the permittee shall submit quarterly reports, to the appropriate Ohio EPA District Office or local air agency, that document the date, time, and duration of each malfunction and/or period of downtime of the continuous fuel flow monitoring system, while the emissions unit was in operation, and the reason (if known) and the corrective actions taken (if any) for each such event. If there was no downtime or malfunction of the continuous fuel flow monitoring system during any calendar quarter, the report shall be submitted so stating it. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year.

[40 CFR Part 75; P0109021]

(8) The permittee shall collect, record, and maintain measurements, data, records, and reports required per 40 CFR Part 75; and shall submit certification, recertification, notifications, applications, monitoring plans, petitions for alternative monitoring systems, electronic quarterly reports, and any other pertinent record and/or report to the Administrator (U.S. EPA), as required by this Part.

[40 CFR Part 75; P0109021]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months prior to the permit expiration.

b. The emission testing* shall be conducted to demonstrate compliance with the NO_x and CO, outlet concentrations, the lbs/MMBtu limitations for SO_2, PE, and the mass emissions limitations for NO_x, CO, VOC, SO_2, PE, ammonia**,** and formaldehyde. The testing schedule outlined in f)(1)a. shall be conducted when firing the turbine without power augmentation. This turbine is also capable of firing with power augmentation but would typically only be operated in this manner during the summer months. Testing while firing with power augmentation shall be required no later than the following summer season after the first event where the turbine is operated in this mode.

c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations:

NO_x	Method 20 of 40 CFR Part 60, Appendix A
PE	Method 5 of 40 CFR Part 60, Appendix A
Formaldehyde	SW-846 Method 0011 or EPA Method 316
VOC	Method 25 of 40 CFR Part 60, Appendix A
SO_2	Method 6 of 40 CFR Part 60, Appendix A**
CO	Method 10 of 40 CFR Part 60, Appendix A
Ammonia	CTM-027

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, NWDO.

d. The stack on this emissions unit shall be constructed such that the height and port locations meet the minimum requirements necessary to perform Methods 1-4 of 40 CFR Part 60, Appendix A.

e. The testing shall be performed at peak load (as defined by 40 CFR Part 60, Subpart GG), unless otherwise specified or approved by the Ohio EPA, NWDO.

f. Not later than 45 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, NWDO refusal to accept the results of the emission tests.

g. Personnel from the Ohio EPA, NWDO shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

h. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, NWDO.

* In lieu of the initial SO_2 emissions testing required above, the permittee may sample the sulfur content of the fuel as provided for in 40 CFR Subpart GG.

[OAC rule 3745-77-07(C)(1) and P0109021]

(2) Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality

control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[40 CFR 60.13; 40 CFR Part 60, Appendices B & F; 40 CFR Part 75]

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

[40 CFR 60.13; 40 CFR Part 60, Appendices B & F; OAC rule 3745-77-07(C)(1); PTI P0109021]

(4) Ongoing compliance with the O_2 monitoring requirements contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and demonstration of compliance with the quality assurance/quality control plan, which shall meet all of thetesting and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[OAC rule 3745-77-07(C)(1); PTI P0109021; 40 CFR 60.13; 40 CFR Part 60, Appendices B & F; 40 CFR Part 75]

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

a. <u>Emission Limitation</u>

3.5 ppmvd at 15% Oxygen, 27.6 lbsNO_x/hr, 35.9 lbsNO_x/hr, 199.1 tons NO_x per rolling 12-month period

<u>Applicable Compliance Method</u>

Compliance with the allowable outlet concentration and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1) and CEM requirement as described in conditions d)(5) and f)(2). Compliance with the annual emission limitation shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

b. <u>Emission Limitation</u>

0.0066 lb PE/MMBtu heat input, 0.0091 lb PE/MMBtu heat input, 13.7 lbs PE/hr, 24.7 lbs PE/hr,103.0 tons PE per rolling 12-month period

<u>Applicable Compliance Method</u>

Compliance with the allowable lb/MMBtu heat input emission limitation and the lbs/hr emission limitations shall be demonstrated by the performance testing as

described in condition f)(1). Compliance with the annual emission limitations shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

c. Emission Limitation

0.0057 lb SO_2/MMBtu heat input, 11.9 lbs SO_2/hr, 16.1 lbs SO_2/hr, 65.8 tons SO_2 per rolling 12-month period

Applicable Compliance Method

Compliance with the allowable lb/MMBtu heat input emission limitation and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1). Compliance with the annual emission limitations shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

d. Emission Limitation

3.9 lbs VOC/hr, 30.0 lbs VOC/hr,1060 tons VOC per rolling 12-month period

Applicable Compliance Method

Compliance with the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1). Compliance with the annual emission limitations shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

e. Emission Limitation

5.0 ppmvd CO at 15% Oxygen, 25.0 ppmvd CO at 15% Oxygen, 23.0 lbs CO/hr, 139.5 lbs CO/hr, 607.7 tons CO per rolling 12-month period

Applicable Compliance Method

Compliance with the allowable outlet concentrations and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1) and CEM requirement as described in conditions d)(5) and f)(2). Compliance with the annual emission limitations shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

f. Emission Limitation

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

Applicable Compliance Method

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

[OAC rule 3745-77-07(C)(1) and P0109021]

g. Emission Limitation

2.7 lbs H_2SO_4/hr, 3.7 lbs H_2SO_4/hr, 15.1 tons H_2SO_4 per rolling 12-month period

Applicable Compliance Method

Compliance with the allowable lbs/hr emission limitations shall be demonstrated by the manufacturer's guaranteed emission rate in conjunction with the sulfur content of the fuel being fired. Compliance with the annual emission limitation shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

h. Emission Limitation

1.23 lbs formaldehyde/hr, 1.75 lbs formaldehyde/hr, 7.2 tons formaldehyde/yr

Applicable Compliance Method

Compliance with the allowable lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1) Compliance with the annual emission limitation shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

i. Emission Limitation

23.7 lbs ammonia/hr, 24.0 lbs ammonia/hr, 97.8 tons ammonia/yr

Applicable Compliance Method

Compliance with the allowable lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1). Compliance with the annual emission limitationshall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

j. Emission Limitation

Start-up and shut-down emissions

67.3 tons NO_x/yr
296.7 tons CO/yr
32.0 tons VOC/yr

Applicable Compliance Method

Compliance with the annual emission limitations shall be demonstrated by the record keeping required in condition d)(1).

[OAC rule 3745-77-07(C)(1); P0109021]

g) Miscellaneous Requirements

(1) None.

2. P002, combined cycle turbine and duct burner

Operations, Property and/or Equipment Description:

Combined Cycle Turbine & 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) [P0109021, issued 11/21/11]	Visible particulate emissions (PE) shall not exceed 10 percent opacity as a six-minute average. <u>Allowable emissions rates without duct burners firing (and with duct burners firing)</u> 3.5 ppmvd nitrogen oxides (NO_x) at 15% oxygen, 27.6 lbsNO_x/hr (35.9 lbsNO_x/hr) 5.0 ppmvd carbon monoxide (CO) at 15% oxygen (25.0 ppmvd CO at 15% oxygen), 23.0 lbs CO/hr (139.5 lbs CO/hr) [see b(2)j.] 3.9 lbs volatile organic compounds (VOC)/hr (30.0 lbs VOC/hr) 0.0066 lbPE/MMBtu heat input (0.0091 lb PE/MMBtu heat input), 13.7 lbs PE/hr (24.7 lbs PE/hr) 0.0057 lb sulfur dioxide (SO_2)/MMBtu heat input, 11.9 lbs SO_2/hr (16.1 lbs SO_2/hr) 2.7 lbs sulfuric acid (H_2SO_4)/hr (3.7 lbs H_2SO_4/hr)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		1.23 lbs formaldehyde/hr (1.75 lbs formaldehyde/hr) and 7.2 tons formaldehyde/yr 23.7 lbs ammonia/hr (24.0 lbs ammonia/hr) and 97.8 tons ammonia/yr <u>Start-up and shut-down emissions</u> 67.3 tons NO_x/yr; 296.7 tons CO/yr; and 32.0 tons VOC/yr. See b)(2)b.
b.	40 CFR 52.21 OAC rules 3745-31-10 through3745-31-20 [P0109021, issued 11/21/11]	199.1 tons NO_xper rolling 12-month period; 607.7 tons CO per rolling 12-month period; 106.0 tons VOC per rolling 12-month period; 103.0 tons PE per rolling 12-month period; 65.8 tons SO_2per rolling 12-month period, and 15.1 tons H_2SO_4 per rolling 12-month period See b)(2)a. and b)(2)k.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)c.
d.	40 CFR Part 60, Subpart GG	See b)(2)c., b)(2)l. through b)(2)n.
e.	40 CFR Part 60, Subpart Da	See b)(2)c.
f.	OAC rule 3745-18-06(F)	See b)(2)c.
g.	OAC rule 3745-17-11(B)(4)	See b)(2)c.
h.	OAC rule 3745-103	See b)(2)d.
i.	40 CFR Part 75	See b)(2)e., b)(2)f. and b)(2)g.

(2) Additional Terms and Conditions

a. The permittee shall employ Best Available Control Technology (BACT) for this emissions unit. BACT has been determined to be the following requirements for control of NO_x, SO_2, CO, PE/PM_{10}, H_2SO_4, and VOC emissions:

PE- Burning natural gas in an efficient combustion turbine. For this permit, it is assumed that all PE emissions are PM_{10}.

NO_x- Use of DLN burners and employment of SCR with a controlled rate of 3.5 ppmvd at 15% Oxygen.

CO- Use of an oxidation catalyst with a controlled rate of 5 ppmvd at 15% Oxygen at greater than 75% load.

VOC- Use of efficient combustion technology in the operation of the turbine with an indirect benefit from the oxidation catalyst.

SO_2- Burning natural gas in an efficient combustion turbine.

H_2SO_4- Burning natural gas in an efficient combustion turbine.

b. The requirements of this rule also include compliance with the requirements of 40 CFR 60 Subpart GG, 40 CFR 52.21, and OAC 3745-31-10 to 20.

c. The emission limitation specified by this rule is less stringent than the emission limit established pursuant to OAC rule 3745-31-05(A)(3).

d. The permittee is subject to the requirements of 40 CFR Part 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

e. The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system, designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The 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 NOx 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_x 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.

f. 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). 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. 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.

g. 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.

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

i. The information management system for this emissions unit shall be capable of monitoring and recording the fuel flow (million cu. ft.) and hours of operation with duct burner firing and without duct burner firing.

j. In addition to periods of duct firing, thecarbon monoxide emission limitations of 25.0 ppmvd at 15% oxygen and 139.5 lbs/hr includes the operational periods of 60%-75% load and use of power augmentation.

k. The annual emission limits above include 1080 hours of start-up and shut-down emissions. It has been determined that there are additional NO_x, CO, and VOC emissions associated with start-up and shut-down periods with estimated worst case emissions rates as described in condition d)(2).

l. In lieu of monitoring the nitrogen content of the natural gas being fired in the turbine as required by 40 CFR Part 60.334(h), the permittee shall install, operate, and maintain systems to continuously monitor and record emissions of NO_x from this emissions unit in accordance with the requirements specified in this permit.

m. 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 the requirements specified in this permit.

n. In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the testing and continuous emissions monitoring requirements for this emissions unit in accordance with the requirements specified in this permit.

c) Operational Restrictions

(1) As specified in the permittee's PTI application, the maximum heat input rating of this emissions unit is 2812 MMBtu/hr. This value corresponds to a maximum natural gas fuel flow of 2.812 million scf/hr, with a lower heat value of 1000 MMBtu/million scf. The permittee shall operate this emissions unit within the parameters specified above, except for start-up* and shut-down. Start-up and shut-down periods shall be defined as any time the unit is operating at less than 60% load.

*Start-up for testing purposes shall be defined as the date when emission unit P001 is set in operation for any purpose. Start-up for the daily operation of the turbine is defined as any time the unit is operating at less than 60% load.

[OAC rule 3745-77-07(A)(1) and P0109021]

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

[OAC rule 3745-77-07(A)(1) and P0109021]

(3) The maximum sulfur content of the natural gas burned in this emissions unit shall not exceed 2 grains per 100 scf.

[OAC rule 3745-77-07(A)(1) and P0109021]

(4) The permittee shall be limited to 1080 hours of operation per year for start-ups and shut-downs for this emissions unit.

[OAC rule 3745-77-07(A)(1) and P0109021]

(5) During the first 12 month of operation following startup, the permittee shall be limited to the following emission limits for NO_x and CO (including start-up and shut-down emissions):

Month(s)	Maximum AllowableCumulative Emissions (tons)	
	NO_x	CO
1	35.0	100.0
1-2	70.0	200.0
1-3	105.0	300.0
1-4	140.0	400.0
1-5	175.0	500.0
1-12	199.1	607.7

After the first 12 calendar months of operation following startup, compliance with the annual emission limitation for NO_x and CO shall be based upon a rolling, 12-month summation of the NO_x and CO emissions.

[OAC rule 3745-77-07(A)(1) and P0109021]

d) Monitoring and/or Recordkeeping Requirements

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

a. number and duration of each cold and hot start-up;

b. number and duration of each shut-down;

c. the start-up and shut-down emissions for NO_x, CO, and VOC, in tons per month.

[OAC rule 3745-77-07(C)(1) and P0109021]

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

a. the natural gas usage rate for each month of operation, in scf/month;

b. the hours of operation for the turbine;

c. the hours of operation for the duct burner;

d. the emission rate* for PE, NO_x, SO_2, CO, VOC, formaldehyde, ammonia and H_2SO_4, for each month of operation, in tons/month;

e. the annual, year-to-date emissions of formaldehyde and ammonia, in tons;

f. the rolling, 12-month summation of the PE, SO_2, VOC and H_2SO_4 (including start-up and shut-down emissions) emissions, in tons.

g. during the first 12 calendar months of operation following startup, the cumulative emission rates for NO_x and CO (including start-up and shut-down emissions), in tons; and

h. beginning after the first 12 calendar months of operation following startup, the rolling 12-month summation of the NO_x and CO emissions (including start-up and shut-down emissions), in tons.

*The permittee shall use CEM data to determine emissions for those pollutants where a CEM is installed. During the periods where a CEM is not operational or for pollutants where a CEM is not installed, the permittee shall use the most recent testing data/emission factors available for each respective pollutant, including the following emission factors for cold (and hot) start-ups: 123 (129) lbsNO_x/hr, 451 (472) lbs CO/hr, and 41.4 (43.1) lbs VOC/hr; for shut-downs: 78 lbsNO_x/hr, 560 lbs CO/hr and 78 lbs VOC/hr.

[OAC rule 3745-77-07(C)(1) and P0109021]

(3) 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.

[OAC rule 3745-77-07(C)(1) and P0109021]

(4) Thepermittee shall maintain documentation on the sulfur contents and heating values of the fuels received. ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels. The permittee shall determine the heat value of the fuels using ASTM method D240. The applicable ranges of some ASTM methods mentions above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ration) may be used, subject to the approval of the Ohio EPA. The newest or most recent revisions to the applicable test method shall be used for these analyses.

Alternative, equivalent methods and frequencies of sampling schedules may be used if they comply with the requirements specified in 40 CFR Part 60.13, and upon written approval by the Ohio EPA.

[OAC rule 3745-77-07(C)(1) and P0109021]

(5) The permittee shall operate and maintain equipment to continuously monitor and record $NO_x$and CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60 and 40 CFR Part 75.

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

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

b. emissions of NO_x and CO in pounds per hour;

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 and CO 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 and/or CO 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 and/or 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).

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

[40 CFR 60.13; 40 CFR Part 60, Appendices B & F; 40 CFR Part 75; P0109021]

(6) The permittee may operate and maintain equipment to continuously monitor and record the fuel flow rate in order to stoichiometrically calculate emissions of NO_x and CO, in pounds per hour, as an alternative to conducting Specification 6. Fuel heat content values for each fuel burned, as applied in the stoichiometric calculations, shall also be recorded. The permittee shall maintain records of data obtained by the fuel flow monitor/meter, including the dates and results of each calibration check and the magnitude of calibration adjustments; periods of downtime and malfunction of the fuel flow monitor/meter; as well as, the reason (if known) and the corrective actions taken (if any) for each such event.

[40 CFR Part 75; P0109021]

(7) 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 in 40 CFR Parts 60 and Part 75.

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

a. the percent O_2 with each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. results of quarterly cylinder gas audits 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).

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

[40 CFR 60.13; 40 CFR Part 60, Appendices B & F; 40 CFR Part 75; P0109021]

(8) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2; the accuracy requirements of Performance Specification 6; and has been certified by U.S. EPA or recommended for certification by Ohio EPA to U.S. EPA under 40 CFR Part 75. The permittee shall document that the fuel flow monitor/meter meets 40 CFR 75 certification requirements prior to the performance specification test, and shall demonstrate how the pound per hour emissions of NOx is being calculated stoichiometrically. The letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[40 CFR 60.13; 40 CFR Part 60, Appendix B; 40 CFR Part 75; P0109021]

(9) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous carbon monoxide (CO) monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate), and the accuracy requirements of Specification 6. The permittee shall document that the fuel flow monitor/meter meets 40 CFR 75 certification requirements prior to the performance

specification test, and shall demonstrate how the pound per hour emissions of CO is being calculated stoichiometrically. The letter(s)/document(s) of certification under Part 60 shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[40 CFR 60.13; 40 CFR Part 60, Appendix B; P0109021]

(10) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous O_2 monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 3; and has been certified by U.S. EPA or recommended for certification by Ohio EPA to U.S. EPA under 40 CFR Part 75. The letter(s)/document(s) of certification under Part 60 and certification or recommendation for certification under Part 75 shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[40 CFR 60.13; 40 CFR Part 60, Appendix B; 40 CFR Part 75; P0109021]

e) Reporting Requirements

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

[OAC rule 3745-15-03(A)]

(2) The permittee shall submit deviation (excursion) reports that identify each day when afuel other than natural gas was burned in this emissions unit. Each report shall besubmitted within 30 days after the deviation occurs.

[OAC rule 3745-77-07 (C)(1); P0109021]

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

a. any recordwhich shows that the sulfur content of the natural gas exceeded 2 gr/100 SCF;

b. all periods of timewhen this emissions unit was not in compliance with the start-up/shut-down requirements specified inc)(1);

c. any exceedance of the hours of operation restriction for start-ups and shutdowns specified in c)(4); and

d. allexceedances of the maximum allowable cumulative emission levels, for NO_x and CO, during the first 12-months of operation following startup specified in c)(5).

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

[OAC rule 3745-77-07 (C)(1); 40 CFR Part 60 Subpart GG and P0109021]

(4) 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, 40 CFR Parts 75 and 76, OAC Chapter 3745-14, 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;

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. 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. Data substitution procedures from 40 CFR 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

[40 CFR 60.7; 40 CFR Part 75; P0109021]

(5) 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, 40 CFR Part 60, 40 CFR Parts 75 and 76, 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;

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, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous CO 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. Data substitution procedures from 40 CFR 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

[40 CFR 60.7; 40 CFR Part 75; P0109021]

(6) 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 other associated monitors;

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

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

v. the total operating time of the continuous O_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

[40 CFR 60.7; 40 CFR Part 75; P0109021]

(7) If using the fuel flow rate to stoichiometrically calculate the pound per hour emissions of NO_x and CO, in place of Specification 6 requirements, the permittee shall submit quarterly reports, to the appropriate Ohio EPA District Office or local air agency, that document the date, time, and duration of each malfunction and/or period of downtime of the continuous fuel flow monitoring system, while the emissions unit was in operation, and the reason (if known) and the corrective actions taken (if any) for each such event. If there was no downtime or malfunction of the continuous fuel flow monitoring system during any calendar quarter, the report shall be submitted so stating it. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year.

[40 CFR Part 75; P0109021]

(8) The permittee shall collect, record, and maintain measurements, data, records, and reports required per 40 CFR Part 75; and shall submit certification, recertification, notifications, applications, monitoring plans, petitions for alternative monitoring systems, electronic quarterly reports, and any other pertinent record and/or report to the Administrator (U.S. EPA), as required by this Part.

[40 CFR Part 75; P0109021]

f) Testing Requirements

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

a. The emission testing shall be conducted within 6 months prior to the permit expiration.

b. The emission testing* shall be conducted to demonstrate compliance with the NO_x and CO, outlet concentrations, the lbs/MMBtu limitations for SO_2, PE, and the mass emissions limitations for NO_x, CO, VOC, SO_2, PE, ammonia**,** and formaldehyde. The testing schedule outlined in f)(1)a. shall be conducted when firing the turbine without power augmentation. This turbine is also capable of firing with power augmentation but would typically only be operated in this manner during the summer months. Testing while firing with power augmentation shall be required no later than the following summer season after the first event where the turbine is operated in this mode.

c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations:

NO_x	Method 20 of 40 CFR Part 60, Appendix A
PE	Method 5 of 40 CFR Part 60, Appendix A
Formaldehyde	SW-846 Method 0011 or EPA Method 316
VOC	Method 25 of 40 CFR Part 60, Appendix A
SO_2	Method 6 of 40 CFR Part 60, Appendix A**
CO	Method 10 of 40 CFR Part 60, Appendix A
Ammonia	CTM-027

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, NWDO.

d. The stack on this emissions unit shall be constructed such that the height and port locations meet the minimum requirements necessary to perform Methods 1-4 of 40 CFR Part 60, Appendix A.

e. The testing shall be performed at peak load (as defined by 40 CFR Part 60, Subpart GG), unless otherwise specified or approved by the Ohio EPA, NWDO.

f. Not later than 45 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, NWDO. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA, NWDO refusal to accept the results of the emission tests.

g. Personnel from the Ohio EPA, NWDO shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

h. A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, NWDO.

* In lieu of the initial SO_2 emissions testing required above, the permittee may sample the sulfur content of the fuel as provided for in 40 CFR Subpart GG.

[OAC rule 3745-77-07(C)(1) and P0109021]

(2) Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[40 CFR 60.13; 40 CFR Part 60, Appendices B & F; 40 CFR Part 75]

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

[40 CFR 60.13; 40 CFR Part 60, Appendices B & F; OAC rule 3745-77-07(C)(1); PTI P0109021]

(4) Ongoing compliance with the O_2 monitoring requirements contained in this permit, 40 CFR Parts 60 and 75, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and demonstration of compliance with the quality assurance/quality control plan, which shall meet all of thetesting and recertification requirements of 40 CFR Part 60 and 40 CFR Part 75.

[OAC rule 3745-77-07(C)(1); PTI P0109021; 40 CFR 60.13; 40 CFR Part 60, Appendices B & F; 40 CFR Part 75]

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

a. Emission Limitation

3.5 ppmvd at 15% Oxygen, 27.6 lbsNO_x/hr, 35.9 lbsNO_x/hr, 199.1 tons NO_x per rolling 12-month period

Applicable Compliance Method

Compliance with the allowable outlet concentration and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1) and CEM requirement as described in conditions d)(5) and f)(2). Compliance with the annual emission limitation shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

b. Emission Limitation

0.0066 lb PE/MMBtu heat input, 0.0091 lb PE/MMBtu heat input, 13.7 lbs PE/hr, 24.7 lbs PE/hr,103.0 tons PE per rolling 12-month period

Applicable Compliance Method

Compliance with the allowable lb/MMBtu heat input emission limitation and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1). Compliance with the annual emission limitations shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

c. Emission Limitation

0.0057 lb SO_2/MMBtu heat input, 11.9 lbs SO_2/hr, 16.1 lbs SO_2/hr, 65.8 tons SO_2 per rolling 12-month period

Applicable Compliance Method

Compliance with the allowable lb/MMBtu heat input emission limitation and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1). Compliance with the annual emission limitations shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

d. Emission Limitation

3.9 lbs VOC/hr, 30.0 lbs VOC/hr,1060 tons VOC per rolling 12-month period

Applicable Compliance Method

Compliance with the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1). Compliance with the annual emission limitations shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

e. Emission Limitation

5.0 ppmvd CO at 15% Oxygen, 25.0 ppmvd CO at 15% Oxygen, 23.0 lbs CO/hr, 139.5 lbs CO/hr, 607.7 tons CO per rolling 12-month period

Applicable Compliance Method

Compliance with the allowable outlet concentrations and the lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1) and CEM requirement as described in conditions d)(5) and f)(2). Compliance with the annual emission limitations shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

f. Emission Limitation

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

Applicable Compliance Method

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

[OAC rule 3745-77-07(C)(1) and P0109021]

g. Emission Limitation

2.7 lbs H_2SO_4/hr, 3.7 lbs H_2SO_4/hr, 15.1 tons H_2SO_4 per rolling 12-month period

Applicable Compliance Method

Compliance with the allowable lbs/hr emission limitations shall be demonstrated by the manufacturer's guaranteed emission rate in conjunction with the sulfur content of the fuel being fired. Compliance with the annual emission limitation shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

h. Emission Limitation

1.23 lbs formaldehyde/hr, 1.75 lbs formaldehyde/hr, 7.2 tons formaldehyde/yr

Applicable Compliance Method

Compliance with the allowable lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1) Compliance with the annual emission limitation shall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

i. Emission Limitation

23.7 lbs ammonia/hr, 24.0 lbs ammonia/hr, 97.8 tons ammonia/yr

Applicable Compliance Method

Compliance with the allowable lbs/hr emission limitations shall be demonstrated by the performance testing as described in condition f)(1). Compliance with the annual emission limitationshall be determined by the record keeping required in condition d)(2).

[OAC rule 3745-77-07(C)(1) and P0109021]

j. Emission Limitation

Start-up and shut-down emissions

67.3 tons NO_x/yr

296.7 tons CO/yr
32.0 tons VOC/yr

Applicable Compliance Method

Compliance with the annual emission limitations shall be demonstrated by the record keeping required in condition d)(1).

[OAC rule 3745-77-07(C)(1); P0109021]

g) Miscellaneous Requirements

(1) None.

3. P003, Cooling Tower

Operations, Property and/or Equipment Description:

Cooling Tower

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	40 CFR 52.21 OAC rules 3745-31-10 through3745-31-20 [P0106280, issued 06/07/10]	See b)(2)a.
b.	OAC rule 3745-31-05 (A)(3) [P0106280, issued 06/07/10]	4.0 lbs particulate emissions (PE)/hr& 17.7 tons PE/yr 0.48 lb particulate matter less than 10 microns in size (PM_{10})/hr& 2.1 tons PM_{10}/yr See b)(2)b.
c.	OAC rule 3745-17-11(B)(4)	See b)(2)c.
d.	OAC rule 3745-17-07(A)(1)	Visible PE shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control technology (BACT) for this emissions unit. BACT has been determined to be the use of high efficiency drift eliminators for control of PE/PM_{10}. The implementation of high efficiency drift eliminators constitute BACT for this emissions unit.

b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-10 through 20, OAC rule 3745-17-07 (A)(1), and 40 CFR Part 52.21.

c. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The permittee shall maintain an average total dissolved solids content of 7,500 ppm or less in this emissions unit.

[OAC rule 3745-77-07(A)(1); P0106280]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform the following monitoring requirements for emissions unit P003 on a monthly basis:

a. test and record the total dissolved solids content; and

b. determine the average dissolved solids content based on a rolling, 12-month average.

[OAC rule 3745-77-07(C)(1); P0106280]

e) Reporting Requirements

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

[OAC rule 3745-15-03(A)]

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

a. anyexceedance of the average total dissolved solids content.

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

[OAC rule 3745-77-07(C)(1); P0106280]

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. <u>Emission Limitation:</u>

4.0 lbs PE/hr and 17.7 tons PE/yr
0.48 lb PM_{10}/hr and 2.1 tons PM_{10}/yr

Applicable Compliance Method:

Compliance with the hourly PE limitation shall be demonstrated by applying the maximum drift loss factor of 0.0005 percent to the maximum average total dissolved solids content of 7,500 ppm for the cooling water. If required, the permittee shall submit a testing proposal which will demonstrate that the maximum drift loss does not exceed 0.0005 percent.

The annual emission limitation was developed by multiplying the hourly emission rate by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is show with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

Compliance with the hourly and annual PM_{10} limitations are based on manufacturer's data showing PM_{10} is 12% of total particulate.

[OAC rule 3745-77-07(C)(1); P0106280]

b. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity as a six-minute average, except as provided by rule

Applicable Compliance Method:

Compliance with the visible emissions limitations established by this permit shall be determined by OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1); P0106280]

g) Miscellaneous Requirements

(1) None.