



State of Ohio Environmental Protection Agency

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2/4/2009

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: Troy Energy, LLC
Facility ID: 0387000377
Permit Type: Minor Permit Modification
Permit Number: P0104234

Dear Ms. Coburn:

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.state.oh.us/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, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA DAPC, Northwest District Office

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director



**State of Ohio Environmental Protection Agency
Division of Air Pollution Control**

PROPOSED

Air Pollution Title V Permit for Troy Energy, LLC

Facility ID: 0387000377

Permit Number: P0104234

Permit Type: Minor Permit Modification

Issued: 2/4/2009

Effective: To be entered upon final issuance

Expiration: To be entered upon final issuance



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Title V Permit
for
Troy Energy, LLC

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Proposed Title V Permit

Permit Number: P0104234

Facility ID: 0387000377

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 0387000377

Facility Description: 670 MW Peaking Station Consisting of four Natural Gas/#2 Oil fired turbines and (2) 2,200,000 gallon storage tank.

Application Number(s): M0000346

Permit Number: P0104234

Permit Description: This modification is to remove CO testing of the turbines when burning fuel oil. The testing requirement when burning natural gas has not been changed.

Permit Type: Minor Permit Modification

Issue Date: 2/4/2009

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:

Troy Energy, LLC
22379 Pemberville Road
Luckey, OH 43443

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

Chris Korleski
Director



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Proposed Title V Permit

Permit Number: P0104234

Facility ID: 0387000377

Effective Date: To be entered upon final issuance

A. Standard Terms and Conditions



1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))
- c) The permittee shall submit required reports in the following manner:
 - (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:



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

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

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

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

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

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

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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



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

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

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

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

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

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

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

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



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

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

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

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to 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 contaminant sources once this permit ceases to be enforceable. The permittee



shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

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

8. Fees

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

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

9. Marketable Permit Programs

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

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

10. Reasonably Anticipated Operating Scenarios

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

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

11. Reopening for Cause

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

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



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

12. Federal and State Enforceability

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

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

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the



Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
- (2) Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

14. Permit Shield

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

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

15. Operational Flexibility

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



soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

16. Emergencies

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

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

17. Off-Permit Changes

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

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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



18. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

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

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

20. Permit to Install Requirement

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

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

21. Air Pollution Nuisance

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

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

22. Permanent Shutdown of an Emissions Unit

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

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

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

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



23. Title VI Provisions

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

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(Authority for term: OAC rule 3745-77-01(H)(11))

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

The permittee shall submit required reports in the following manner:

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

25. Records Retention Requirements Under State Law Only

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

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports



pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

27. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

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

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

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

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

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Proposed Title V Permit

Permit Number: P0104234

Facility ID: 0387000377

Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Proposed Title V Permit

Permit Number: P0104234

Facility ID: 0387000377

Effective Date: To be entered upon final issuance

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Proposed Title V Permit

Permit Number: P0104234

Facility ID: 0387000377

Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. P001, Combustion Turbine 1

Operations, Property and/or Equipment Description:

1,570 mmBTU/hr combustion turbine

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

(1) d)(6) – d)(8)

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)	Control requirements, See b)(2)a. When firing natural gas, emissions shall not exceed: 9 ppmvd nitrogen oxides (NOx) at 15% Oxygen, 0.037 lb NOx/mmBtu heat input, 65.0 lbs NOx/hr and 241.0 tons NOx/yr 0.0015 lb sulfur dioxide (SO2)/mmBtu heat input, 2.4 lbs SO2/hr and 10.0 tons SO2/year 0.018 lb carbon monoxide (CO)/mmBtu heat input, 32.0 lbs CO/hr and 133.0 tons CO/yr 0.0017 lb volatile organic compounds (VOC)/mmBtu heat input, 3.0 lbs VOC/hr and 12.5 tons VOC/year 0.010 lb particulate emissions (PE)/mmBtu heat input, 18.0 lbs PE/hr and 74.8 tons PE/yr 1.7 lbs formaldehyde/hr and 7.0 tons formaldehyde/yr 1.1 lbs sulfuric acid/hr and 4.6 tons sulfuric acid/yr



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Visible particulate emissions shall not exceed 10 percent opacity as a six-minute average</p> <p>When firing number 2 fuel oil/distillate oil, emissions shall not exceed:</p> <p>42 ppmvd NOx at 15% Oxygen, 0.1765 lb NOx/mmBtu heat input, 351.0 lbs NOx/hr and 180.8 tons NOx/yr</p> <p>0.052 lb SO2 /mmBtu heat input, 103.0 SO2/hr and 52.8 tons SO2/year</p> <p>0.036 lb CO/mmBtu heat input, 72.0 lbs CO/hr and 36.9 tons CO/yr</p> <p>0.0040 lb VOC/mmBtu heat input, 8.0 lbs VOC/hr and 4.1 tons VOC/year</p> <p>0.020 lb PE/mmBtu heat input, 39.0 lbs PE/hr and 20.0 tons PE/yr</p> <p>0.48 lb formaldehyde/hr and 0.3 tons formaldehyde/yr</p> <p>11.0 lbs sulfuric acid/hr and 5.6 tons sulfuric acid/yr</p>
b.	OAC rule 3745-31-05(D)	<p>Group emissions limits from P001, P002, P003 and P004, combined: 52.8 tons SO2, 133.0 tons CO, 241.0 tons NOx, 74.8 tons PE, 7.0 tons of any individual HAP, 24.9 tons of combined HAPs [see b)(2)e]</p> <ul style="list-style-type: none"> All of the emission limitations above are based rolling, 12-month periods.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average, except as specified by rule.
d.	OAC rule 3745-17-11(B)(4)	See b)(2)b.
e.	OAC rule 3745-18-06(F)	See b)(2)b.
f.	40 CFR, Part 60, Subpart GG	See b)(2)c.
g.	40 CFR, Part 75	See b)(2)d.
h.	OAC rule 3745-103	See b)(2)d.



(2) Additional Terms and Conditions

- a. The permittee shall install and maintain dry low NOx burners and a water injection system on this emissions unit.
- b. The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
- c. The emissions limits based on this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3). Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60, Subpart GG.
- d. If 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 emissions of Hazardous Air Pollutants (HAPs), as defined in Section 112(b) of the Clean Air Act, from emissions units P001, P002, P003 and P004 combined, shall not exceed 7.0 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, per rolling 12 month period.

(c) Operational Restrictions

(1) The maximum annual fuel usage for emissions units P001, P002, P003 and P004 combined, shall not exceed any of the following:

- a. 14,020 million cubic feet of natural gas per rolling 12-month period;
- b. 15.77 million gallons of number 2 fuel oil/distillate oil usage per rolling 12-month period;
- c. a cumulative 14,020 million cubic feet fuel (natural gas and number 2 fuel oil/distillate oil usage) per rolling 12-month period where:

1 million cubic feet of natural gas = 1 million cubic feet of fuel and;
1 million gallons of number 2 fuel oil/distillate oil = 889 million cubic feet of fuel

To ensure enforceability after the first 12 calendar months following the startup*, compliance with the annual usage restrictions shall be based on a rolling, 12-month summation.

*Startup for the facility shall be defined as the date when emissions units P001, P002, P003, or P004 are set in operation for any purpose. Start-up for the daily operation of the turbine is defined in condition c)(2) and c)(3) below.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

(2) As specified in the permittee's PTI application, the maximum design electric output of this unit is 191.2 MW*, measured at the generator terminal, when firing natural gas. This value corresponds to a maximum natural gas flow of 1.88 million cf/hr with a lower heat value of 931 Btu/cf (1749.5 mmBtu/hr), at -10 degrees F. As specified in the permittee's



PTI application, the maximum design electric output of this unit is 196.9 MW*, measured at the generator terminal, when using number 2 fuel oil/distillate oil. This value corresponds to a maximum fuel flow of 15,306 gallons/hr with a lower heat value of 129,930 Btu/gallon (1988.7 MM Btu/hr), at -10 degrees F. The permittee shall operate this emissions unit within the design electric output of the system as specified above, except for start-up and shutdown. Start-up shall be defined as the time necessary to bring the unit to its minimum operating temperature (as recommended by the vendor), but under no circumstances shall it exceed 60 minutes in duration. Shutdown periods shall not exceed 60 minutes in duration.

* The short term emission limits in this permit are based on these maximum heat input rates, and represent the worst case emissions. Variables in determining short term emissions include citing requirements for the facility, quality of fuel, fuel flow rate with respect to ambient temperature, and operational demands from the customer. The Ohio EPA is aware that extreme temperature conditions impact the capacity of the unit and the agency may adjust the potential to emit of the emissions units accordingly.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

- (3) With the exception of startup and shutdown, emissions unit P001 shall be operated at minimum of 50% load. The permittee may petition the Ohio EPA, Northwest District Office (NWDO) to operate at a greater load range if it can demonstrate to the Agency's satisfaction that the emissions unit will comply with all applicable emission limits in this permit, and modeling requirements pursuant to Engineering Guide number 69.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

- (4) The permittee shall burn only natural gas and number 2 fuel oil/distillate oil in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 0.5 grains/scf. The maximum sulfur content of the number 2 fuel oil/distillate oil shall not exceed 0.05 percent by weight.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain monthly records of the following information for emissions units P001, P002, P003, and P004, combined:
 - a. the quantity of natural gas fired, in million cubic feet ;
 - b. the quantity of number 2 oil/distillate oil fired, in gallons;
 - c. the monthly emission rate* for PE, NOx, SO2, CO, any individual and combined HAP, in tons;
 - d. after the first 12 calendar months of operation following startup, the rolling, 12-month summation of the quantity of natural gas fired, number 2 fuel oil/distillate oil fired, and the cumulative fuel usage (as defined in c)(1)c.); and



- e. after the first 12 calendar months of operation following startup, the rolling, 12-month summation of the emission rate for PE, NO_x, SO₂, CO, any individual and combined HAP.

* The permittee shall use the most recent testing/emissions data available for each respective pollutant, in conjunction with the quantity of fuel fired, as recorded above, to determine monthly emissions. The monthly emissions calculated above may include an adjustment for the average ambient temperature for that month the unit is operating.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) For each day during which the permittee burns a fuel other than natural gas or number 2 fuel oil/distillate oil, 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 PTI #03-13362]

- (3) The information management system for this emissions unit shall be capable of monitoring and recording electric output (in MW), fuel flow (gallons and million cubic feet), and hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (4) The permittee shall maintain documentation on the sulfur contents and heating values of the fuels received as follows: 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 mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Ohio EPA, NWDO. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used if they comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75, or upon written approval by the Ohio EPA, NWDO. The frequency of the sampling shall be such that it complies with the requirements specified in 40 CFR Part 60.334 and/or 40 CFR Part 75 or as approved by the Ohio EPA.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (5) Except for periods described in 40 CFR part 60.13, the permittee shall install, operate, and maintain equipment to continuously monitor* and record NO_x from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75 or as approved by the Ohio EPA.

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



* The installation and operation of systems to continuously monitor and record emissions of NOx may be performed in lieu of continuously monitoring the fuel consumption, water ratio, and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (6) The permit to install for these emissions units (P001, P002, P003 and P004) were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the MAGLC. The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Formaldehyde
 TLV (ug/m3): 272.69
 Maximum Hourly Emission Rate (lbs/hr): 3.4*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.076
 MAGLC (ug/m3): 6.49

Pollutant: Sulfuric Acid
 TLV (ug/m3): 1000
 Maximum Hourly Emission Rate (lbs/hr): 44.0*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.983
 MAGLC (ug/m3): 23.8

*This was modeled for emissions units P001, P002, P003, & P004 combined.

- (7) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and



- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(QQQ)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (QQQ)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

- (8) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or number 2 fuel oil/distillate oil was burned in this emissions unit. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel usage limitations. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (3) The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (4) The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 0.5 grains/scf, or the sulfur content of the number 2 fuel oil/distillate oil exceed the 0.05% by weight limit established



in this permit. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (5) Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(l) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition c)(2) above, malfunctions, extreme temperature conditions, etc.), and corrective actions taken (if any), of all instances of NOx values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NOx emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting any continuous NOx monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (6) Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(l) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Ohio EPA, NWDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (7) The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of Condition c)(3) above. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]



- (8) In lieu of the excess emissions reports required in 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for emissions unit P001 in accordance with this permit.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (9) This emissions unit is subject to the applicable provisions of Subpart GG of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 is also federally enforceable.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

f) Testing Requirements

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

- a. This emission unit has the capability of firing either natural gas or number 2 fuel oil/distillate oil. When firing natural gas, the emission testing shall be completed by September 1, 2009. The testing timeframe(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office.
- b. The emission testing shall be conducted to demonstrate compliance with the lbs/mmBtu limitation and the mass emission limitation for CO.
- c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for CO Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, NWDO.
- d. 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. 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.

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.

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.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

(2) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitations:

When firing natural gas:

65.0 lbs NOx/hr and 241.0 tons NOx/yr

0.037 lb NOx/mmBtu heat input

9 ppmvd at 15% Oxygen

When firing number 2 fuel oil:

351.0 lbs NOx/hr and 180.8 tons NOx/yr

0.1765 lb NOx/mmBtu heat input

42 ppmvd at 15% Oxygen

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the above lbs/hr, lb/mmBtu and outlet concentration limitations. Continued compliance with these emission limitations shall be demonstrated by the continuous emissions monitoring requirement as described in condition d)(5) and the reporting requirement as described in e)(5).

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

b. Emission Limitations:

When firing natural gas:

18.0 lbs PE/hr and 74.8 tons PE/yr

0.010 lb PE/mmBtu heat input

When firing number 2 fuel oil:

39.0 lbs PE/hr and 20.0 tons PE/yr

0.02 lb PE/mmBtu heat input

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr and lb/mmBtu heat input emission limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).



[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

c. Emission Limitations:

When firing natural gas:

2.4 lbs SO₂/hr and 10.0 tons SO₂/yr

0.0015 lb SO₂/mmBtu heat input

When firing number 2 fuel oil:

103.0 lbs SO₂/hr and 52.8 tons SO₂/yr

0.052 lb SO₂/mmBtu heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitations by maintaining compliance with conditions c)(4) and d)(4). If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Provided compliance is demonstrated with the hourly emission limitation, compliance with the respective lbs/mmBtu heat input limitation will be assumed. Compliance with the annual emission limitation shall be determined by the recordkeeping required in condition d)(1)e.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

d. Emission Limitations:

When firing natural gas:

3.0 lbs VOC/hr and 12.5 tons VOC/yr

0.0017 lb VOC/mmBtu heat input

When firing number 2 fuel oil:

8.0 lbs VOC/hr and 4.1 tons VOC/yr

0.004 lb VOC/mmBtu heat input

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr and lb/mmBtu heat input emission limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

e. Emission Limitation:

When firing natural gas:

32.0 lbs CO/hr and 133.0 tons CO/yr

0.018 lb CO/mmBtu heat input



When firing number 2 fuel oil:
72.0 lbs CO/hr and 36.9 tons CO/yr
0.036 lb CO/mmBtu heat input

Applicable Compliance Method:

Compliance with the lbs/hr and lb/mmBtu heat input emission limitations when firing natural gas shall be demonstrated by the performance testing as described in condition f)(1)b.

Compliance with the lbs/hr and lb/mmBtu heat input emission limitations when firing number 2 fuel oil has been demonstrated by the performance testing conducted on July 14, 2005. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

f.

Emission Limitations:

When firing natural gas:
1.7 lb formaldehyde/hr, 7.0 tons formaldehyde/yr

When firing number 2 fuel oil:
0.48 lb formaldehyde/hr, 0.3 ton formaldehyde/yr

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr emission limitation when firing natural gas. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 320 of 40 CFR, Part 60, Appendix A.

Compliance with the lbs/hr emission limitation when firing number 2 fuel oil shall be demonstrated by the multiplying the AP-42 emission factor table 3.1-4 (4/2000) by the maximum fuel usage defined in condition c)(2). If required, the permittee shall demonstrate compliance by emission testing in accordance with Methods 1 - 4 and 320 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the above hourly emission limit by the annual hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

g.

Emission Limitations:

When firing natural gas:
1.1 lb sulfuric acid/hr and 4.6 ton sulfuric acid/yr

When firing number 2 fuel oil:
11.0 lbs sulfuric acid/hr and 5.6 tons sulfuric acid/yr



Applicable Compliance Method:

The hourly emission limitation for sulfuric acid mist is based on the manufacturer's performance specification for this pollutant while firing number 2 fuel oil and natural gas. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods.

Compliance with the annual emission limitations shall be determined by multiplying the above hourly emission limit by the annual hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

h. Emission Limitation:

- 52.8 tons of SO₂ per rolling 12-month period
- 133.0 tons of CO per rolling 12-month period
- 241.0 tons of NO_x per rolling 12-month period
- 74.8 tons PE per rolling 12-month period
- 7.0 tons of any individual HAP per rolling 12-month period
- 24.9 tons of combined HAPs per rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined by the recordkeeping requirements in condition d)(1)e.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

i. Emission Limitations:

(1) Visible particulate emissions when burning natural gas shall not exceed 10 percent opacity as a six-minute average; and (2) Visible particulate emissions when burning fuel oil shall not exceed 20 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, 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 PTI #03-13362]

g) Miscellaneous Requirements

- (1) Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) For the continuous NO_x monitoring system, the permittee shall maintain information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

The permittee shall maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Proposed Title V Permit

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shall follow the requirements of 40 CFR Part 60, Appendix F and/or 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.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (3) In accordance with OAC rule 3745-31-05(D), sections c) through f) of the terms and conditions constitute the federally enforceable portions of permit to install #03-13362.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]



2. P002, Combustion Turbine 2

Operations, Property and/or Equipment Description:

1,570 mmBTU/hr combustion turbine

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

(1) d)(6) – d)(8)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Control requirements, See b)(2)a.</p> <p>When firing natural gas, emissions shall not exceed:</p> <p>9 ppmvd nitrogen oxides (NOx) at 15% Oxygen, 0.037 lb NOx/mmBtu heat input, 65.0 lbs NOx/hr and 241.0 tons NOx/yr</p> <p>0.0015 lb sulfur dioxide (SO2)/mmBtu heat input, 2.4 lbs SO2/hr and 10.0 tons SO2/year</p> <p>0.018 lb carbon monoxide (CO)/mmBtu heat input, 32.0 lbs CO/hr and 133.0 tons CO/yr</p> <p>0.0017 lb volatile organic compounds (VOC)/mmBtu heat input, 3.0 lbs VOC/hr and 12.5 tons VOC/year</p> <p>0.010 lb particulate emissions (PE)/mmBtu heat input, 18.0 lbs PE/hr and 74.8 tons PE/yr</p> <p>1.7 lbs formaldehyde/hr and 7.0 tons formaldehyde/yr</p> <p>1.1 lbs sulfuric acid/hr and 4.6 tons sulfuric acid/yr</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Visible particulate emissions shall not exceed 10 percent opacity as a six-minute average</p> <p>When firing number 2 fuel oil/distillate oil, emissions shall not exceed:</p> <p>42 ppmvd NOx at 15% Oxygen, 0.1765 lb NOx/mmBtu heat input, 351.0 lbs NOx/hr and 180.8 tons NOx/yr</p> <p>0.052 lb SO2 /mmBtu heat input, 103.0 SO2/hr and 52.8 tons SO2/year</p> <p>0.036 lb CO/mmBtu heat input, 72.0 lbs CO/hr and 36.9 tons CO/yr</p> <p>0.0040 lb VOC/mmBtu heat input, 8.0 lbs VOC/hr and 4.1 tons VOC/year</p> <p>0.020 lb PE/mmBtu heat input, 39.0 lbs PE/hr and 20.0 tons PE/yr</p> <p>0.48 lb formaldehyde/hr and 0.3 tons formaldehyde/yr</p> <p>11.0 lbs sulfuric acid/hr and 5.6 tons sulfuric acid/yr</p>
b.	OAC rule 3745-31-05(D)	<p>Group emissions limits from P001, P002, P003 and P004, combined: 52.8 tons SO2, 133.0 tons CO, 241.0 tons NOx, 74.8 tons PE, 7.0 tons of any individual HAP, 24.9 tons of combined HAPs [see b)(2)e]</p> <p>All of the emission limitations above are based rolling, 12-month periods.</p>
c.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as specified by rule
d.	OAC rule 3745-17-11(B)(4)	See b)(2)b.
e.	OAC rule 3745-18-06(F)	See b)(2)b.
f.	40 CFR, Part 60, Subpart GG	See b)(2)c.
g.	40 CFR, Part 75	See b)(2)d.
h.	OAC rule 3745-103	See b)(2)d.



(2) Additional Terms and Conditions

- a. The permittee shall install and maintain dry low NOx burners and a water injection system on this emissions unit.
- b. The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
- c. The emissions limits based on this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3). Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60, Subpart GG.
- d. If 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 emissions of Hazardous Air Pollutants (HAPs), as defined in Section 112(b) of the Clean Air Act, from emissions units P001, P002, P003 and P004 combined, shall not exceed 7.0 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, per rolling 12 month period.

c) Operational Restrictions

(1) The maximum annual fuel usage for emissions units P001, P002, P003 and P004 combined, shall not exceed any of the following:

- a. 14,020 million cubic feet of natural gas per rolling 12-month period;
- b. 15.77 million gallons of number 2 fuel oil/distillate oil usage per rolling 12-month period;
- c. a cumulative 14,020 million cubic feet fuel (natural gas and number 2 fuel oil/distillate oil usage) per rolling 12-month period where:

1 million cubic feet of natural gas = 1 million cubic feet of fuel and;
1 million gallons of number 2 fuel oil/distillate oil = 889 million cubic feet of fuel

To ensure enforceability after the first 12 calendar months following the startup*, compliance with the annual usage restrictions shall be based on a rolling, 12-month summation.

*Startup for the facility shall be defined as the date when emissions units P001, P002, P003, or P004 are set in operation for any purpose. Start-up for the daily operation of the turbine is defined in condition c)(2) and c)(3) below.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

(2) As specified in the permittee's PTI application, the maximum design electric output of this unit is 191.2 MW*, measured at the generator terminal, when firing natural gas. This value corresponds to a maximum natural gas flow of 1.88 million cf/hr with a lower heat value of 931 Btu/cf (1749.5 mmBtu/hr), at -10 degrees F. As specified in the permittee's



PTI application, the maximum design electric output of this unit is 196.9 MW*, measured at the generator terminal, when using number 2 fuel oil/distillate oil. This value corresponds to a maximum fuel flow of 15,306 gallons/hr with a lower heat value of 129,930 Btu/gallon (1988.7 MM Btu/hr), at -10 degrees F. The permittee shall operate this emissions unit within the design electric output of the system as specified above, except for start-up and shutdown. Start-up shall be defined as the time necessary to bring the unit to its minimum operating temperature (as recommended by the vendor), but under no circumstances shall it exceed 60 minutes in duration. Shutdown periods shall not exceed 60 minutes in duration.

* The short term emission limits in this permit are based on these maximum heat input rates, and represent the worst case emissions. Variables in determining short term emissions include citing requirements for the facility, quality of fuel, fuel flow rate with respect to ambient temperature, and operational demands from the customer. The Ohio EPA is aware that extreme temperature conditions impact the capacity of the unit and the agency may adjust the potential to emit of the emissions units accordingly.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

- (3) With the exception of startup and shutdown, emissions unit P001 shall be operated at minimum of 50% load. The permittee may petition the Ohio EPA, Northwest District Office (NWDO) to operate at a greater load range if it can demonstrate to the Agency's satisfaction that the emissions unit will comply with all applicable emission limits in this permit, and modeling requirements pursuant to Engineering Guide number 69.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

- (4) The permittee shall burn only natural gas and number 2 fuel oil/distillate oil in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 0.5 grains/scf. The maximum sulfur content of the number 2 fuel oil/distillate oil shall not exceed 0.05 percent by weight.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain monthly records of the following information for emissions units P001, P002, P003, and P004 combined:
 - d. the quantity of natural gas fired, in million cubic feet ;
 - e. the quantity of number 2 oil/distillate oil fired, in gallons;
 - f. the monthly emission rate* for PE, NOx, SO2, CO, any individual and combined HAP, in tons;
 - g. after the first 12 calendar months of operation following startup, the rolling, 12-month summation of the quantity of natural gas fired, number 2 fuel oil/distillate oil fired, and the cumulative fuel usage (as defined in c)(1)c.); and



- h. after the first 12 calendar months of operation following startup, the rolling, 12-month summation of the emission rate for PE, NOx, SO2, CO, any individual and combined HAP.

* The permittee shall use the most recent testing/emissions data available for each respective pollutant, in conjunction with the quantity of fuel fired, as recorded above, to determine monthly emissions. The monthly emissions calculated above may include an adjustment for the average ambient temperature for that month the unit is operating.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) For each day during which the permittee burns a fuel other than natural gas or number 2 fuel oil/distillate oil, 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 PTI #03-13362]

- (3) The information management system for this emissions unit shall be capable of monitoring and recording electric output (in MW), fuel flow (gallons and million cubic feet), and hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (4) The permittee shall maintain documentation on the sulfur contents and heating values of the fuels received as follows: 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 mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Ohio EPA, NWDO. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used if they comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75, or upon written approval by the Ohio EPA, NWDO. The frequency of the sampling shall be such that it complies with the requirements specified in 40 CFR Part 60.334 and/or 40 CFR Part 75 or as approved by the Ohio EPA.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (5) Except for periods described in 40 CFR part 60.13, the permittee shall install, operate, and maintain equipment to continuously monitor* and record NOx from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75 or as approved by the Ohio EPA.

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



* The installation and operation of systems to continuously monitor and record emissions of NOx may be performed in lieu of continuously monitoring the fuel consumption, water ratio, and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (6) The permit to install for these emissions units (P001, P002, P003 and P004) were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the MAGLC. The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Formaldehyde
 TLV (ug/m3): 272.69
 Maximum Hourly Emission Rate (lbs/hr): 3.4*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.076
 MAGLC (ug/m3): 6.49

Pollutant: Sulfuric Acid
 TLV (ug/m3): 1000
 Maximum Hourly Emission Rate (lbs/hr): 44.0*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.983
 MAGLC (ug/m3): 23.8

*This was modeled for emissions units P001, P002, P003, & P004 combined.

- (7) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and



- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(QQQ)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (QQQ)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

- (8) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or number 2 fuel oil/distillate oil was burned in this emissions unit. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel usage limitations. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (3) The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (4) The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 0.5 grains/scf, or the sulfur content of the number 2 fuel oil/distillate oil exceed the 0.05% by weight limit established



in this permit. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (5) Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(l) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition c)(2) above, malfunctions, extreme temperature conditions, etc.), and corrective actions taken (if any), of all instances of NOx values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NOx emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting any continuous NOx monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (6) Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(l) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Ohio EPA, NWDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (7) The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of Condition c)(3) above. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]



- (8) In lieu of the excess emissions reports required in 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for emissions unit P002 in accordance with this permit.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (9) This emissions unit is subject to the applicable provisions of Subpart GG of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 is also federally enforceable.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

f) Testing Requirements

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

- a. This emission unit has the capability of firing either natural gas or number 2 fuel oil/distillate oil. When firing natural gas, the emission testing shall be completed by September 1, 2009. The testing timeframe(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office.
- b. The emission testing shall be conducted to demonstrate compliance with the lbs/mmBtu limitation and the mass emission limitation for CO.
- c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for CO Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, NWDO.
- d. 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. 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.

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.

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.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

(2) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitations:

When firing natural gas:

65.0 lbs NOx/hr and 241.0 tons NOx/yr

0.037 lb NOx/mmBtu heat input

9 ppmvd at 15% Oxygen

When firing number 2 fuel oil:

351.0 lbs NOx/hr and 180.8 tons NOx/yr

0.1765 lb NOx/mmBtu heat input

42 ppmvd at 15% Oxygen

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the above lbs/hr, lb/mmBtu and outlet concentration limitations. Continued compliance with these emission limitations shall be demonstrated by the continuous emissions monitoring requirement as described in condition d)(5) and the reporting requirement as described in e)(5).

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

b. Emission Limitations:

When firing natural gas:

18.0 lbs PE/hr and 74.8 tons PE/yr

0.010 lb PE/mmBtu heat input

When firing number 2 fuel oil:

39.0 lbs PE/hr and 20.0 tons PE/yr

0.02 lb PE/mmBtu heat input

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr and lb/mmBtu heat input emission limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).



[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

c. Emission Limitations:

When firing natural gas:

2.4 lbs SO₂/hr and 10.0 tons SO₂/yr

0.0015 lb SO₂/mmBtu heat input

When firing number 2 fuel oil:

103.0 lbs SO₂/hr and 52.8 tons SO₂/yr

0.052 lb SO₂/mmBtu heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitations by maintaining compliance with conditions c)(4) and d)(4). If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Provided compliance is demonstrated with the hourly emission limitation, compliance with the respective lbs/mmBtu heat input limitation will be assumed. Compliance with the annual emission limitation shall be determined by the recordkeeping required in condition d)(1)e.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

d. Emission Limitations:

When firing natural gas:

3.0 lbs VOC/hr and 12.5 tons VOC/yr

0.0017 lb VOC/mmBtu heat input

When firing number 2 fuel oil:

8.0 lbs VOC/hr and 4.1 tons VOC/yr

0.004 lb VOC/mmBtu heat input

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr and lb/mmBtu heat input emission limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

e. Emission Limitation:

When firing natural gas:

32.0 lbs CO/hr and 133.0 tons CO/yr

0.018 lb CO/mmBtu heat input



When firing number 2 fuel oil:
72.0 lbs CO/hr and 36.9 tons CO/yr
0.036 lb CO/mmBtu heat input

Applicable Compliance Method:

Compliance with the lbs/hr and lb/mmBtu heat input emission limitations when firing natural gas shall be demonstrated by the performance testing as described in condition f)(1)b.

Compliance with the lbs/hr and lb/mmBtu heat input emission limitations when firing number 2 fuel oil has been demonstrated by the performance testing conducted on July 14, 2005. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

f.

Emission Limitations:

When firing natural gas:
1.7 lb formaldehyde/hr, 7.0 tons formaldehyde/yr

When firing number 2 fuel oil:
0.48 lb formaldehyde/hr, 0.3 ton formaldehyde/yr

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr emission limitation when firing natural gas. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 320 of 40 CFR, Part 60, Appendix A.

Compliance with the lbs/hr emission limitation when firing number 2 fuel oil shall be demonstrated by the multiplying the AP-42 emission factor table 3.1-4 (4/2000) by the maximum fuel usage defined in condition c)(2). If required, the permittee shall demonstrate compliance by emission testing in accordance with Methods 1 - 4 and 320 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the above hourly emission limit by the annual hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

g.

Emission Limitations:

When firing natural gas:
1.1 lb sulfuric acid/hr and 4.6 ton sulfuric acid/yr

When firing number 2 fuel oil:
11.0 lbs sulfuric acid/hr and 5.6 tons sulfuric acid/yr



Applicable Compliance Method:

The hourly emission limitation for sulfuric acid mist is based on the manufacturer's performance specification for this pollutant while firing number 2 fuel oil and natural gas. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods.

Compliance with the annual emission limitations shall be determined by multiplying the above hourly emission limit by the annual hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

h. Emission Limitation:

- 52.8 tons of SO₂ per rolling 12-month period
- 133.0 tons of CO per rolling 12-month period
- 241.0 tons of NO_x per rolling 12-month period
- 74.8 tons PE per rolling 12-month period
- 7.0 tons of any individual HAP per rolling 12-month period
- 24.9 tons of combined HAPs per rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined by the recordkeeping requirements in condition d)(1)e.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

i. Emission Limitations:

(1) Visible particulate emissions when burning natural gas shall not exceed 10 percent opacity as a six-minute average; and (2) Visible particulate emissions when burning fuel oil shall not exceed 20 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, 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 PTI #03-13362]

g) **Miscellaneous Requirements**

- (1) Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) For the continuous NO_x monitoring system, the permittee shall maintain information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

The permittee shall maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

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shall follow the requirements of 40 CFR Part 60, Appendix F and/or 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.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (3) In accordance with OAC rule 3745-31-05(D), sections c) through f) of the terms and conditions constitute the federally enforceable portions of permit to install #03-13362.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]



3. P003, Combustion Turbine 3

Operations, Property and/or Equipment Description:

1,570 mmBTU/hr combustion turbine

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

(1) d)(6) – d)(8)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Control requirements, See b)(2)a.</p> <p>When firing natural gas, emissions shall not exceed:</p> <p>9 ppmvd nitrogen oxides (NOx) at 15% Oxygen, 0.037 lb NOx/mmBtu heat input, 65.0 lbs NOx/hr and 241.0 tons NOx/yr</p> <p>0.0015 lb sulfur dioxide (SO2)/mmBtu heat input, 2.4 lbs SO2/hr and 10.0 tons SO2/year</p> <p>0.018 lb carbon monoxide (CO)/mmBtu heat input, 32.0 lbs CO/hr and 133.0 tons CO/yr</p> <p>0.0017 lb volatile organic compounds (VOC)/mmBtu heat input, 3.0 lbs VOC/hr and 12.5 tons VOC/year</p> <p>0.010 lb particulate emissions (PE)/mmBtu heat input, 18.0 lbs PE/hr and 74.8 tons PE/yr</p> <p>1.7 lbs formaldehyde/hr and 7.0 tons formaldehyde/yr</p> <p>1.1 lbs sulfuric acid/hr and 4.6 tons sulfuric acid/yr</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Visible particulate emissions shall not exceed 10 percent opacity as a six-minute average</p> <p>When firing number 2 fuel oil/distillate oil, emissions shall not exceed:</p> <p>42 ppmvd NOx at 15% Oxygen, 0.1765 lb NOx/mmBtu heat input, 351.0 lbs NOx/hr and 180.8 tons NOx/yr</p> <p>0.052 lb SO2 /mmBtu heat input, 103.0 SO2/hr and 52.8 tons SO2/year</p> <p>0.036 lb CO/mmBtu heat input, 72.0 lbs CO/hr and 36.9 tons CO/yr</p> <p>0.0040 lb VOC/mmBtu heat input, 8.0 lbs VOC/hr and 4.1 tons VOC/year</p> <p>0.020 lb PE/mmBtu heat input, 39.0 lbs PE/hr and 20.0 tons PE/yr</p> <p>0.48 lb formaldehyde/hr and 0.3 tons formaldehyde/yr</p> <p>11.0 lbs sulfuric acid/hr and 5.6 tons sulfuric acid/yr</p>
b.	OAC rule 3745-31-05(D)	<p>Group emissions limits from P001, P002, P003 and P004, combined: 52.8 tons SO2, 133.0 tons CO, 241.0 tons NOx, 74.8 tons PE, 7.0 tons of any individual HAP, 24.9 tons of combined HAPs [see b)(2)e]</p> <ul style="list-style-type: none"> All of the emission limitations above are based rolling, 12-month periods.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as specified by rule
d.	OAC rule 3745-17-11(B)(4)	See b)(2)b.
e.	OAC rule 3745-18-06(F)	See b)(2)b.
f.	40 CFR, Part 60, Subpart GG	See b)(2)c.
g.	40 CFR, Part 75	See b)(2)d.
h.	OAC rule 3745-103	See b)(2)d.



(2) Additional Terms and Conditions

- a. The permittee shall install and maintain dry low NOx burners and a water injection system on this emissions unit.
- b. The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
- c. The emissions limits based on this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3). Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60, Subpart GG.
- d. If 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 emissions of Hazardous Air Pollutants (HAPs), as defined in Section 112(b) of the Clean Air Act, from emissions units P001, P002, P003 and P004 combined, shall not exceed 7.0 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, per rolling 12 month period.

c) Operational Restrictions

(1) The maximum annual fuel usage for emissions units P001, P002, P003 and P004 combined, shall not exceed any of the following:

- a. 14,020 million cubic feet of natural gas per rolling 12-month period;
- b. 15.77 million gallons of number 2 fuel oil/distillate oil usage per rolling 12-month period;
- c. a cumulative 14,020 million cubic feet fuel (natural gas and number 2 fuel oil/distillate oil usage) per rolling 12-month period where:

1 million cubic feet of natural gas = 1 million cubic feet of fuel and;
1 million gallons of number 2 fuel oil/distillate oil = 889 million cubic feet of fuel

To ensure enforceability after the first 12 calendar months following the startup*, compliance with the annual usage restrictions shall be based on a rolling, 12-month summation.

*Startup for the facility shall be defined as the date when emissions units P001, P002, P003, or P004 are set in operation for any purpose. Start-up for the daily operation of the turbine is defined in condition c)(2) and c)(3) below.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

(2) As specified in the permittee's PTI application, the maximum design electric output of this unit is 191.2 MW*, measured at the generator terminal, when firing natural gas. This value corresponds to a maximum natural gas flow of 1.88 million cf/hr with a lower heat value of 931 Btu/cf (1749.5 mmBtu/hr), at -10 degrees F. As specified in the permittee's



PTI application, the maximum design electric output of this unit is 196.9 MW*, measured at the generator terminal, when using number 2 fuel oil/distillate oil. This value corresponds to a maximum fuel flow of 15,306 gallons/hr with a lower heat value of 129,930 Btu/gallon (1988.7 MM Btu/hr), at -10 degrees F. The permittee shall operate this emissions unit within the design electric output of the system as specified above, except for start-up and shutdown. Start-up shall be defined as the time necessary to bring the unit to its minimum operating temperature (as recommended by the vendor), but under no circumstances shall it exceed 60 minutes in duration. Shutdown periods shall not exceed 60 minutes in duration.

* The short term emission limits in this permit are based on these maximum heat input rates, and represent the worst case emissions. Variables in determining short term emissions include citing requirements for the facility, quality of fuel, fuel flow rate with respect to ambient temperature, and operational demands from the customer. The Ohio EPA is aware that extreme temperature conditions impact the capacity of the unit and the agency may adjust the potential to emit of the emissions units accordingly.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

- (3) With the exception of startup and shutdown, emissions unit P001 shall be operated at minimum of 50% load. The permittee may petition the Ohio EPA, Northwest District Office (NWDO) to operate at a greater load range if it can demonstrate to the Agency's satisfaction that the emissions unit will comply with all applicable emission limits in this permit, and modeling requirements pursuant to Engineering Guide number 69.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

- (4) The permittee shall burn only natural gas and number 2 fuel oil/distillate oil in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 0.5 grains/scf. The maximum sulfur content of the number 2 fuel oil/distillate oil shall not exceed 0.05 percent by weight.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain monthly records of the following information for emissions units P001, P002, P003, and P004 combined:
 - a. the quantity of natural gas fired, in million cubic feet ;
 - b. the quantity of number 2 oil/distillate oil fired, in gallons;
 - c. the monthly emission rate* for PE, NOx, SO2, CO, any individual and combined HAP, in tons;
 - d. after the first 12 calendar months of operation following startup, the rolling, 12-month summation of the quantity of natural gas fired, number 2 fuel oil/distillate oil fired, and the cumulative fuel usage (as defined in c)(1)c.); and



- e. after the first 12 calendar months of operation following startup, the rolling, 12-month summation of the emission rate for PE, NOx, SO2, CO, any individual and combined HAP.

* The permittee shall use the most recent testing/emissions data available for each respective pollutant, in conjunction with the quantity of fuel fired, as recorded above, to determine monthly emissions. The monthly emissions calculated above may include an adjustment for the average ambient temperature for that month the unit is operating.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) For each day during which the permittee burns a fuel other than natural gas or number 2 fuel oil/distillate oil, 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 PTI #03-13362]

- (3) The information management system for this emissions unit shall be capable of monitoring and recording electric output (in MW), fuel flow (gallons and million cubic feet), and hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (4) The permittee shall maintain documentation on the sulfur contents and heating values of the fuels received as follows: 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 mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Ohio EPA, NWDO. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used if they comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75, or upon written approval by the Ohio EPA, NWDO. The frequency of the sampling shall be such that it complies with the requirements specified in 40 CFR Part 60.334 and/or 40 CFR Part 75 or as approved by the Ohio EPA.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (5) Except for periods described in 40 CFR part 60.13, the permittee shall install, operate, and maintain equipment to continuously monitor* and record NOx from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75 or as approved by the Ohio EPA.

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



* The installation and operation of systems to continuously monitor and record emissions of NOx may be performed in lieu of continuously monitoring the fuel consumption, water ratio, and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (6) The permit to install for these emissions units (P001, P002, P003 and P004) were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the MAGLC. The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Formaldehyde
 TLV (ug/m3): 272.69
 Maximum Hourly Emission Rate (lbs/hr): 3.4*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.076
 MAGLC (ug/m3): 6.49

Pollutant: Sulfuric Acid
 TLV (ug/m3): 1000
 Maximum Hourly Emission Rate (lbs/hr): 44.0*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.983
 MAGLC (ug/m3): 23.8

*This was modeled for emissions units P001, P002, P003, & P004 combined.

- (7) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and



- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(QQQ)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (QQQ)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

- (8) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or number 2 fuel oil/distillate oil was burned in this emissions unit. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel usage limitations. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (3) The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (4) The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 0.5 grains/scf, or the sulfur content of the number 2 fuel oil/distillate oil exceed the 0.05% by weight limit established



in this permit. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (5) Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(l) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition c)(2) above, malfunctions, extreme temperature conditions, etc.), and corrective actions taken (if any), of all instances of NOx values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NOx emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting any continuous NOx monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (6) Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(l) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Ohio EPA, NWDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (7) The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of Condition c)(3) above. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]



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

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (9) This emissions unit is subject to the applicable provisions of Subpart GG of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 is also federally enforceable.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

f) Testing Requirements

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

- a. This emissions unit has the capability of firing either natural gas or number 2 fuel oil/distillate oil. When firing natural gas, the emission testing shall be completed by September 1, 2009. The testing timeframe(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office.
- b. The emission testing shall be conducted to demonstrate compliance with the lbs/mmBtu limitation and the mass emission limitation for CO.
- c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for CO Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, NWDO.
- d. 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. 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.

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.

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.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

(2) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitations:

When firing natural gas:

65.0 lbs NOx/hr and 241.0 tons NOx/yr

0.037 lb NOx/mmBtu heat input

9 ppmvd at 15% Oxygen

When firing number 2 fuel oil:

351.0 lbs NOx/hr and 180.8 tons NOx/yr

0.1765 lb NOx/mmBtu heat input

42 ppmvd at 15% Oxygen

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the above lbs/hr, lb/mmBtu and outlet concentration limitations. Continued compliance with these emission limitations shall be demonstrated by the continuous emissions monitoring requirement as described in condition d)(5) and the reporting requirement as described in e)(5).

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

b. Emission Limitations:

When firing natural gas:

18.0 lbs PE/hr and 74.8 tons PE/yr

0.010 lb PE/mmBtu heat input

When firing number 2 fuel oil:

39.0 lbs PE/hr and 20.0 tons PE/yr

0.02 lb PE/mmBtu heat input

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr and lb/mmBtu heat input emission limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).



[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

c. Emission Limitations:

When firing natural gas:

2.4 lbs SO₂/hr and 10.0 tons SO₂/yr

0.0015 lb SO₂/mmBtu heat input

When firing number 2 fuel oil:

103.0 lbs SO₂/hr and 52.8 tons SO₂/yr

0.052 lb SO₂/mmBtu heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitations by maintaining compliance with conditions c)(4) and d)(4). If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Provided compliance is demonstrated with the hourly emission limitation, compliance with the respective lbs/mmBtu heat input limitation will be assumed. Compliance with the annual emission limitation shall be determined by the recordkeeping required in condition d)(1)e.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

d. Emission Limitations:

When firing natural gas:

3.0 lbs VOC/hr and 12.5 tons VOC/yr

0.0017 lb VOC/mmBtu heat input

When firing number 2 fuel oil:

8.0 lbs VOC/hr and 4.1 tons VOC/yr

0.004 lb VOC/mmBtu heat input

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr and lb/mmBtu heat input emission limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

e. Emission Limitation:

When firing natural gas:

32.0 lbs CO/hr and 133.0 tons CO/yr

0.018 lb CO/mmBtu heat input



When firing number 2 fuel oil:
72.0 lbs CO/hr and 36.9 tons CO/yr
0.036 lb CO/mmBtu heat input

Applicable Compliance Method:

Compliance with the lbs/hr and lb/mmBtu heat input emission limitations when firing natural gas shall be demonstrated by the performance testing as described in condition f)(1)b.

Compliance with the lbs/hr and lb/mmBtu heat input emission limitations when firing number 2 fuel oil has been demonstrated by the performance testing conducted on July 14, 2005. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

f.

Emission Limitations:

When firing natural gas:
1.7 lb formaldehyde/hr, 7.0 tons formaldehyde/yr

When firing number 2 fuel oil:
0.48 lb formaldehyde/hr, 0.3 ton formaldehyde/yr

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr emission limitation when firing natural gas. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 320 of 40 CFR, Part 60, Appendix A.

Compliance with the lbs/hr emission limitation when firing number 2 fuel oil shall be demonstrated by the multiplying the AP-42 emission factor table 3.1-4 (4/2000) by the maximum fuel usage defined in condition c)(2). If required, the permittee shall demonstrate compliance by emission testing in accordance with Methods 1 - 4 and 320 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the above hourly emission limit by the annual hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

g.

Emission Limitations:

When firing natural gas:
1.1 lb sulfuric acid/hr and 4.6 ton sulfuric acid/yr

When firing number 2 fuel oil:
11.0 lbs sulfuric acid/hr and 5.6 tons sulfuric acid/yr



Applicable Compliance Method:

The hourly emission limitation for sulfuric acid mist is based on the manufacturer's performance specification for this pollutant while firing number 2 fuel oil and natural gas. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods.

Compliance with the annual emission limitations shall be determined by multiplying the above hourly emission limit by the annual hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

h. Emission Limitation:

- 52.8 tons of SO₂ per rolling 12-month period
- 133.0 tons of CO per rolling 12-month period
- 241.0 tons of NO_x per rolling 12-month period
- 74.8 tons PE per rolling 12-month period
- 7.0 tons of any individual HAP per rolling 12-month period
- 24.9 tons of combined HAPs per rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined by the recordkeeping requirements in condition d)(1)e.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

i. Emission Limitations:

(1) Visible particulate emissions when burning natural gas shall not exceed 10 percent opacity as a six-minute average; and (2) Visible particulate emissions when burning fuel oil shall not exceed 20 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, 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 PTI #03-13362]

g) Miscellaneous Requirements

- (1) Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) For the continuous NO_x monitoring system, the permittee shall maintain information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

The permittee shall maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan



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Division of Air Pollution Control

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shall follow the requirements of 40 CFR Part 60, Appendix F and/or 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.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (3) In accordance with OAC rule 3745-31-05(D), sections c) through f) of the terms and conditions constitute the federally enforceable portions of permit to install #03-13362.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]



4. P004, Combustion Turbine 4

Operations, Property and/or Equipment Description:

1,570 mmBTU/hr combustion turbine

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

(1) d)(6) – d)(8)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<p>Control requirements, See b)(2)a.</p> <p>When firing natural gas, emissions shall not exceed:</p> <p>9 ppmvd nitrogen oxides (NOx) at 15% Oxygen, 0.037 lb NOx/mmBtu heat input, 65.0 lbs NOx/hr and 241.0 tons NOx/yr</p> <p>0.0015 lb sulfur dioxide (SO2)/mmBtu heat input, 2.4 lbs SO2/hr and 10.0 tons SO2/year</p> <p>0.018 lb carbon monoxide (CO)/mmBtu heat input, 32.0 lbs CO/hr and 133.0 tons CO/yr</p> <p>0.0017 lb volatile organic compounds (VOC)/mmBtu heat input, 3.0 lbs VOC/hr and 12.5 tons VOC/year</p> <p>0.010 lb particulate emissions (PE)/mmBtu heat input, 18.0 lbs PE/hr and 74.8 tons PE/yr</p> <p>1.7 lbs formaldehyde/hr and 7.0 tons formaldehyde/yr</p> <p>1.1 lbs sulfuric acid/hr and 4.6 tons sulfuric acid/yr</p>



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>Visible particulate emissions shall not exceed 10 percent opacity as a six-minute average</p> <p>When firing number 2 fuel oil/distillate oil, emissions shall not exceed:</p> <p>42 ppmvd NOx at 15% Oxygen, 0.1765 lb NOx/mmBtu heat input, 351.0 lbs NOx/hr and 180.8 tons NOx/yr</p> <p>0.052 lb SO2 /mmBtu heat input, 103.0 SO2/hr and 52.8 tons SO2/year</p> <p>0.036 lb CO/mmBtu heat input, 72.0 lbs CO/hr and 36.9 tons CO/yr</p> <p>0.0040 lb VOC/mmBtu heat input, 8.0 lbs VOC/hr and 4.1 tons VOC/year</p> <p>0.020 lb PE/mmBtu heat input, 39.0 lbs PE/hr and 20.0 tons PE/yr</p> <p>0.48 lb formaldehyde/hr and 0.3 tons formaldehyde/yr</p> <p>11.0 lbs sulfuric acid/hr and 5.6 tons sulfuric acid/yr</p>
b.	OAC rule 3745-31-05(D)	<p>Group emissions limits from P001, P002, P003 and P004, combined: 52.8 tons SO2, 133.0 tons CO, 241.0 tons NOx, 74.8 tons PE, 7.0 tons of any individual HAP, 24.9 tons of combined HAPs [see b)(2)e]</p> <ul style="list-style-type: none"> All of the emission limitations above are based rolling, 12-month periods.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as specified by rule
d.	OAC rule 3745-17-11(B)(4)	See b)(2)b.
e.	OAC rule 3745-18-06(F)	See b)(2)b.
f.	40 CFR, Part 60, Subpart GG	See b)(2)c.
g.	40 CFR, Part 75	See b)(2)d.
h.	OAC rule 3745-103	See b)(2)d.



(2) Additional Terms and Conditions

- a. The permittee shall install and maintain dry low NO_x burners and a water injection system on this emissions unit.
- b. The emissions limit based on this applicable rule is less stringent than the limit established pursuant to OAC rule 3745-31-05(A)(3).
- c. The emissions limits based on this applicable rule are less stringent than the limits established pursuant to OAC rule 3745-31-05(A)(3). Except as provided for in the terms and conditions in this permit, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60, Subpart GG.
- d. If 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 emissions of Hazardous Air Pollutants (HAPs), as defined in Section 112(b) of the Clean Air Act, from emissions units P001, P002, P003 and P004 combined, shall not exceed 7.0 tons per year for any individual HAP and 24.9 tons per year for any combination of HAPs, per rolling 12 month period.

c) Operational Restrictions

(1) The maximum annual fuel usage for emissions units P001, P002, P003 and P004 combined, shall not exceed any of the following:

- a. 14,020 million cubic feet of natural gas per rolling 12-month period;
- b. 15.77 million gallons of number 2 fuel oil/distillate oil usage per rolling 12-month period;
- c. a cumulative 14,020 million cubic feet fuel (natural gas and number 2 fuel oil/distillate oil usage) per rolling 12-month period where:

1 million cubic feet of natural gas = 1 million cubic feet of fuel and;
1 million gallons of number 2 fuel oil/distillate oil = 889 million cubic feet of fuel

To ensure enforceability after the first 12 calendar months following the startup*, compliance with the annual usage restrictions shall be based on a rolling, 12-month summation.

*Startup for the facility shall be defined as the date when emissions units P001, P002, P003, or P004 are set in operation for any purpose. Start-up for the daily operation of the turbine is defined in condition c)(2) and c)(3) below.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

(2) As specified in the permittee's PTI application, the maximum design electric output of this unit is 191.2 MW*, measured at the generator terminal, when firing natural gas. This value corresponds to a maximum natural gas flow of 1.88 million cf/hr with a lower heat value of 931 Btu/cf (1749.5 mmBtu/hr), at -10 degrees F. As specified in the permittee's



PTI application, the maximum design electric output of this unit is 196.9 MW*, measured at the generator terminal, when using number 2 fuel oil/distillate oil. This value corresponds to a maximum fuel flow of 15,306 gallons/hr with a lower heat value of 129,930 Btu/gallon (1988.7 MM Btu/hr), at -10 degrees F. The permittee shall operate this emissions unit within the design electric output of the system as specified above, except for start-up and shutdown. Start-up shall be defined as the time necessary to bring the unit to its minimum operating temperature (as recommended by the vendor), but under no circumstances shall it exceed 60 minutes in duration. Shutdown periods shall not exceed 60 minutes in duration.

* The short term emission limits in this permit are based on these maximum heat input rates, and represent the worst case emissions. Variables in determining short term emissions include citing requirements for the facility, quality of fuel, fuel flow rate with respect to ambient temperature, and operational demands from the customer. The Ohio EPA is aware that extreme temperature conditions impact the capacity of the unit and the agency may adjust the potential to emit of the emissions units accordingly.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

- (3) With the exception of startup and shutdown, emissions unit P001 shall be operated at minimum of 50% load. The permittee may petition the Ohio EPA, Northwest District Office (NWDO) to operate at a greater load range if it can demonstrate to the Agency's satisfaction that the emissions unit will comply with all applicable emission limits in this permit, and modeling requirements pursuant to Engineering Guide number 69.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

- (4) The permittee shall burn only natural gas and number 2 fuel oil/distillate oil in this emissions unit. The maximum sulfur content of the natural gas shall not exceed 0.5 grains/scf. The maximum sulfur content of the number 2 fuel oil/distillate oil shall not exceed 0.05 percent by weight.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall maintain monthly records of the following information for emissions units P001, P002, P003, and P004 combined:
 - a. the quantity of natural gas fired, in million cubic feet ;
 - b. the quantity of number 2 oil/distillate oil fired, in gallons;
 - c. the monthly emission rate* for PE, NOx, SO2, CO, any individual and combined HAP, in tons;
 - d. after the first 12 calendar months of operation following startup, the rolling, 12-month summation of the quantity of natural gas fired, number 2 fuel oil/distillate oil fired, and the cumulative fuel usage (as defined in c)(1)c.); and



- e. after the first 12 calendar months of operation following startup, the rolling, 12-month summation of the emission rate for PE, NO_x, SO₂, CO, any individual and combined HAP.

* The permittee shall use the most recent testing/emissions data available for each respective pollutant, in conjunction with the quantity of fuel fired, as recorded above, to determine monthly emissions. The monthly emissions calculated above may include an adjustment for the average ambient temperature for that month the unit is operating.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) For each day during which the permittee burns a fuel other than natural gas or number 2 fuel oil/distillate oil, 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 PTI #03-13362]

- (3) The information management system for this emissions unit shall be capable of monitoring and recording electric output (in MW), fuel flow (gallons and million cubic feet), and hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (4) The permittee shall maintain documentation on the sulfur contents and heating values of the fuels received as follows: 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 mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Ohio EPA, NWDO. The newest or most recent revisions to the applicable test method shall be used for these analyses. Alternative, equivalent methods may be used if they comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75, or upon written approval by the Ohio EPA, NWDO. The frequency of the sampling shall be such that it complies with the requirements specified in 40 CFR Part 60.334 and/or 40 CFR Part 75 or as approved by the Ohio EPA.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (5) Except for periods described in 40 CFR part 60.13, the permittee shall install, operate, and maintain equipment to continuously monitor* and record NO_x from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13 and/or 40 CFR Part 75 or as approved by the Ohio EPA.

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



* The installation and operation of systems to continuously monitor and record emissions of NOx may be performed in lieu of continuously monitoring the fuel consumption, water ratio, and nitrogen content of the fuel being fired in the turbine, as required by 40 CFR 60.334.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (6) The permit to install for these emissions units (P001, P002, P003 and P004) were evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model. The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the MAGLC. The following summarizes the results of the modeling for the "worst case" pollutants:

Pollutant: Formaldehyde
 TLV (ug/m3): 272.69
 Maximum Hourly Emission Rate (lbs/hr): 3.4*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.076
 MAGLC (ug/m3): 6.49

Pollutant: Sulfuric Acid
 TLV (ug/m3): 1000
 Maximum Hourly Emission Rate (lbs/hr): 44.0*
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.983
 MAGLC (ug/m3): 23.8

*This was modeled for emissions units P001, P002, P003, & P004 combined.

- (7) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and



- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(QQQ)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (QQQ)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

- (8) The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or number 2 fuel oil/distillate oil was burned in this emissions unit. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel usage limitations. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (3) The permittee shall submit quarterly reports which identify each period during which an exemption for ice-fog provided in 40 CFR 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (4) The permittee shall submit deviation (excursion) reports that identify any record which shows that the sulfur content of the natural gas exceeded 0.5 grains/scf, or the sulfur content of the number 2 fuel oil/distillate oil exceed the 0.05% by weight limit established



in this permit. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (5) Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(l) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting the date, commencement and completion times, duration, magnitude, reason (i.e., startup and shutdown periods as defined in Condition c)(2) above, malfunctions, extreme temperature conditions, etc.), and corrective actions taken (if any), of all instances of NOx values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NOx emissions for the calendar quarter (in tons).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, NWDO documenting any continuous NOx monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

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

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (6) Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(l) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the Ohio EPA, NWDO within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (7) The permittee shall submit deviation (excursion) reports that identify each time when this emissions unit was not in compliance with the requirements of Condition c)(3) above. These reports are due by the date described in Part A - Standard Terms and Conditions of this permit under section 24.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]



- (8) In lieu of the excess emissions reports required in 40 CFR Part 60.334, the permittee shall submit excess and emissions reports for emissions unit P004 in accordance with this permit.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (9) This emissions unit is subject to the applicable provisions of Subpart GG of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 is also federally enforceable.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

f) Testing Requirements

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

- a. This emission unit has the capability of firing either natural gas or number 2 fuel oil/distillate oil. When firing natural gas, the emission testing shall be completed by September 1, 2009. The testing timeframe(s) specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office.
- b. The emission testing shall be conducted to demonstrate compliance with the lbs/mmBtu limitation and the mass emission limitation for CO.
- c. The following test method(s) shall be employed to demonstrate compliance with the above emissions limitations: for CO Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, NWDO.
- d. 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. 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.

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.

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.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

(2) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitations:

When firing natural gas:

65.0 lbs NOx/hr and 241.0 tons NOx/yr

0.037 lb NOx/mmBtu heat input

9 ppmvd at 15% Oxygen

When firing number 2 fuel oil:

351.0 lbs NOx/hr and 180.8 tons NOx/yr

0.1765 lb NOx/mmBtu heat input

42 ppmvd at 15% Oxygen

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the above lbs/hr, lb/mmBtu and outlet concentration limitations. Continued compliance with these emission limitations shall be demonstrated by the continuous emissions monitoring requirement as described in condition d)(5) and the reporting requirement as described in e)(5).

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

b. Emission Limitations:

When firing natural gas:

18.0 lbs PE/hr and 74.8 tons PE/yr

0.010 lb PE/mmBtu heat input

When firing number 2 fuel oil:

39.0 lbs PE/hr and 20.0 tons PE/yr

0.02 lb PE/mmBtu heat input

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr and lb/mmBtu heat input emission limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).



[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- c. Emission Limitations:
When firing natural gas:
2.4 lbs SO₂/hr and 10.0 tons SO₂/yr
0.0015 lb SO₂/mmBtu heat input

When firing number 2 fuel oil:
103.0 lbs SO₂/hr and 52.8 tons SO₂/yr
0.052 lb SO₂/mmBtu heat input

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitations by maintaining compliance with conditions c)(4) and d)(4). If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Provided compliance is demonstrated with the hourly emission limitation, compliance with the respective lbs/mmBtu heat input limitation will be assumed. Compliance with the annual emission limitation shall be determined by the recordkeeping required in condition d)(1)e.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- d. Emission Limitations:
When firing natural gas:
3.0 lbs VOC/hr and 12.5 tons VOC/yr
0.0017 lb VOC/mmBtu heat input

When firing number 2 fuel oil:
8.0 lbs VOC/hr and 4.1 tons VOC/yr
0.004 lb VOC/mmBtu heat input

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr and lb/mmBtu heat input emission limitations. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 18, 25 or 25A of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- e. Emission Limitation:
When firing natural gas:
32.0 lbs CO/hr and 133.0 tons CO/yr
0.018 lb CO/mmBtu heat input



When firing number 2 fuel oil:
72.0 lbs CO/hr and 36.9 tons CO/yr
0.036 lb CO/mmBtu heat input

Applicable Compliance Method:

Compliance with the lbs/hr and lb/mmBtu heat input emission limitations when firing natural gas shall be demonstrated by the performance testing as described in condition f)(1)b.

Compliance with the lbs/hr and lb/mmBtu heat input emission limitations when firing number 2 fuel oil has been demonstrated by the performance testing conducted on July 14, 2005. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the maximum lbs/mmBtu rates above by the maximum fuel usage and heat values for each respective fuel as described in condition c)(1) and c)(2).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

f.

Emission Limitations:

When firing natural gas:
1.7 lb formaldehyde/hr, 7.0 tons formaldehyde/yr

When firing number 2 fuel oil:
0.48 lb formaldehyde/hr, 0.3 ton formaldehyde/yr

Applicable Compliance Method:

The permittee has demonstrated initial compliance with the lbs/hr emission limitation when firing natural gas. If required, the permittee shall demonstrate compliance with these limitations by testing in accordance with Methods 1 - 4 and 320 of 40 CFR, Part 60, Appendix A.

Compliance with the lbs/hr emission limitation when firing number 2 fuel oil shall be demonstrated by the multiplying the AP-42 emission factor table 3.1-4 (4/2000) by the maximum fuel usage defined in condition c)(2). If required, the permittee shall demonstrate compliance by emission testing in accordance with Methods 1 - 4 and 320 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitations shall be determined by multiplying the above hourly emission limit by the annual hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

g.

Emission Limitations:

When firing natural gas:
1.1 lb sulfuric acid/hr and 4.6 ton sulfuric acid/yr

When firing number 2 fuel oil:
11.0 lbs sulfuric acid/hr and 5.6 tons sulfuric acid/yr



Applicable Compliance Method:

The hourly emission limitation for sulfuric acid mist is based on the manufacturer's performance specification for this pollutant while firing number 2 fuel oil and natural gas. If required, the permittee shall demonstrate compliance by emission testing in accordance with approved US EPA test methods.

Compliance with the annual emission limitations shall be determined by multiplying the above hourly emission limit by the annual hours of operation.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

h. Emission Limitation:

- 52.8 tons of SO₂ per rolling 12-month period
- 133.0 tons of CO per rolling 12-month period
- 241.0 tons of NO_x per rolling 12-month period
- 74.8 tons PE per rolling 12-month period
- 7.0 tons of any individual HAP per rolling 12-month period
- 24.9 tons of combined HAPs per rolling 12-month period

Applicable Compliance Method:

Compliance with the annual emission limitations shall be determined by the recordkeeping requirements in condition d)(1)e.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

i. Emission Limitations:

(1) Visible particulate emissions when burning natural gas shall not exceed 10 percent opacity as a six-minute average; and (2) Visible particulate emissions when burning fuel oil shall not exceed 20 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, 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 PTI #03-13362]

g) Miscellaneous Requirements

- (1) Should this emissions unit be converted from a simple cycle to a combined cycle turbine in the future, a new BAT determination would be required.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) For the continuous NO_x monitoring system, the permittee shall maintain information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.

The permittee shall maintain a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan



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shall follow the requirements of 40 CFR Part 60, Appendix F and/or 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.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (3) In accordance with OAC rule 3745-31-05(D), sections c) through f) of the terms and conditions constitute the federally enforceable portions of permit to install #03-13362.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]



5. T001, Fuel Oil Tank No. 1

Operations, Property and/or Equipment Description:

2.2 million #2 fuel oil storage tank

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)	Use of submerged fill 0.56 ton volatile organic compounds (VOC)/yr See b)(2)a.
b.	OAC rule 3745-21-09(L)	Exempt (See c)(1))
c.	40 CFR, Part 60, Subpart Kb	See c)(1) Record keeping requirements (See d)(1) and d)(2))

(2) Additional Terms and Conditions

a. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than or equal to 5.2 kPa (0.75 psia).

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

(2) The annual material throughput for this emissions unit shall not exceed 15,770,000 gallons per year.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]



d) Monitoring and/or Recordkeeping Requirements

- (1) The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 is also federally enforceable.

In accordance with 40 CFR 60.116b (a)(b)(c) and (d), the owner and operator of this emissions unit shall maintain records of the following information:

- a. the types of petroleum liquids stored in the tank;
- b. the period of storage;
- c. the maximum true vapor pressure (in pounds per square inch absolute), during the storage period; and
- d. the permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) Available data may be used to determine the maximum true vapor pressure, as follows:
- a. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - b. For crude oil or refined petroleum products, the vapor pressure may be obtained by the following:
 - (i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
 - (ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.



- c. For other liquids, the vapor pressure:
 - (i) may be obtained from standard reference texts; or
 - (ii) determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or
 - (iii) measured by an appropriate method approved by the Administrator; or
 - (iv) calculated by an appropriate method approved by the Administrator.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (3) The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements:
 - a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in section d)(3).
 - b. For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in 40 CFR 60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
 - (i) ASTM Method D2879-83 (incorporated by reference--see 40 CFR 60.17); or
 - (ii) ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or
 - (iii) as measured by an appropriate method as approved by the Administrator.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (4) The permittee shall maintain monthly records of the amount (gallons per month and total gallons, to date for the calendar year) of material throughput for this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

e) Reporting Requirements

- (1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 0.75 pound per square inch absolute (5.2 kPa), the permittee shall notify the Ohio EPA, NWDO within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the corrective



actions taken to achieve compliance. These reports shall be submitted by January 31 of each year.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:
0.56 ton VOC/yr

Applicable Compliance Method:

The emission limitation was established in accordance with EPA, AP-42 Tanks 3.1 4.09D computer program using a maximum annual throughput of 15,770,000 gallons. Compliance shall be determined in accordance with the monitoring and recordkeeping specified in section d)(4).

g) Miscellaneous Requirements

(1) None.



6. T002, Fuel Oil Tank No. 2

Operations, Property and/or Equipment Description:

2.2 million gallon #2 oil storage tank

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)	Use of submerged fill 0.56 ton volatile organic compounds (VOC)/yr See b)(2)a.
b.	OAC rule 3745-21-09(L)	Exempt (See c)(1))
c.	40 CFR, Part 60, Subpart Kb	See c)(1) Record keeping requirements (See d)(1) and d)(2))

(2) Additional Terms and Conditions

a. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Kb.

c) Operational Restrictions

(1) The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than or equal to 5.2 kPa (0.75 psia).

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]

(2) The annual material throughput for this emissions unit shall not exceed 15,770,000 gallons per year.

[OAC rule 3745-77-07(A)(1) and PTI #03-13362]



d) Monitoring and/or Recordkeeping Requirements

- (1) The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 is also federally enforceable.

In accordance with 40 CFR 60.116b (a)(b)(c) and (d), the owner and operator of this emissions unit shall maintain records of the following information:

- a. the types of petroleum liquids stored in the tank;
- b. the period of storage;
- c. the maximum true vapor pressure (in pounds per square inch absolute), during the storage period; and
- d. the permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) Available data may be used to determine the maximum true vapor pressure, as follows:
- a. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
 - b. For crude oil or refined petroleum products, the vapor pressure may be obtained by the following:
 - (i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
 - (ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.



- c. For other liquids, the vapor pressure:
 - (i) may be obtained from standard reference texts; or
 - (ii) determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or
 - (iii) measured by an appropriate method approved by the Administrator; or
 - (iv) calculated by an appropriate method approved by the Administrator.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (3) The permittee of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements:

- a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in section d)(3).
- b. For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in 40 CFR 60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
 - (i) ASTM Method D2879-83 (incorporated by reference--see 40 CFR 60.17); or
 - (ii) ASTM Method D323-82 (incorporated by reference--see 40 CFR 60.17); or
 - (iii) as measured by an appropriate method as approved by the Administrator.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (4) The permittee shall maintain monthly records of the amount (gallons per month and total gallons, to date for the calendar year) of material throughput for this emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

e) Reporting Requirements

- (1) If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is equal to or greater than 0.75 pound per square inch absolute (5.2 kPa), the permittee shall notify the Ohio EPA, NWDO within 30 days of becoming aware of the occurrence.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

- (2) The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the corrective



actions taken to achieve compliance. These reports shall be submitted by January 31 of each year.

[OAC rule 3745-77-07(C)(1) and PTI #03-13362]

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. Emission Limitation: 0.56 ton VOC/yr

Applicable Compliance Method: The emission limitation was established in accordance with EPA, AP-42 Tanks 3.1 4.09D computer program using a maximum annual throughput of 15,770,000 gallons. Compliance shall be determined in accordance with the monitoring and record keeping specified in section d)(4).

g) Miscellaneous Requirements

(1) None.