Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

2/26/2016

Genevieve Damico *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: Duke Energy Indiana, Madison Generating Station
Facility ID: 1409000896
Permit Type: Renewal
Permit Number: P0118963

Dear Ms. Damico:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. If 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) 644-2835 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: Southwest Ohio Air Quality Agency

PROPOSED

Division of Air Pollution Control
Title V Permit
for
Duke Energy Indiana, Madison Generating Station

Facility ID:	1409000896
Permit Number:	P0118963
Permit Type:	Renewal
Issued:	2/26/2016
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
Duke Energy Indiana, Madison Generating Station

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Authorization

Facility ID:	1409000896
Facility Description:	Electric generation utility with eight natural gas-fired, 80MW, simple-cycle turbines
Application Number(s):	A0053392
Permit Number:	P0118963
Permit Description:	Renewal of Title V Operating Permit for electric generation utility with eight 84 MW natural gas-fired simple-cycle turbines and two 1.5 MW emergency diesel engine generator sets
Permit Type:	Renewal
Issue Date:	2/26/2016
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	P0105343

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

Duke Energy Indiana, Madison Generating Station
5657 Kennel Road
Trenton, OH 45067

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

Southwest Ohio Air Quality Agency
250 William Howard Taft Rd.
Cincinnati, OH 45219
(513)946-7777

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Southwest Ohio Air Quality Agency. 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 and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

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

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

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

(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

(5) Standard Term and Condition A. 30.

(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 recordingsfor 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 by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

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

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

Any submittedscheduled maintenancerequests, 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 submitted promptly to the Southwest Ohio Air Quality Agency. Except as provided below, the written reports shall be submitted 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 to the Southwest Ohio Air Quality 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." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

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

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Southwest Ohio Air Quality Agency unless otherwise specified.

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

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From 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) 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 permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with 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 Southwest Ohio Air Quality 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 Southwest Ohio Air Quality 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 on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms

and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittentconsistent with A.13.d.2.a above.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.

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 Southwest Ohio Air Quality 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 Southwest Ohio Air Quality 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 Federal Register 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 is subject to 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.

Unless otherwise exempted, noemissions unit identified in this permit that has beencertified 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 operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11)))

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

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to theSouthwest Ohio Air Quality 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 Southwest Ohio Air Quality 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 quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention RequirementsUnder State Law Only

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

26. Inspections and Information Requests

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

whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

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 Southwest Ohio Air Quality 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 Southwest Ohio Air Quality 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 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 potential to emit; or

c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event ofan alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Southwest Ohio Air Quality Agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

B. Facility-Wide Terms and Conditions

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

   a) None.

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

   a) L001 - non-halogenated parts washer; and

   b) P011 - 140 kW (1.6 MMBtu/hour) emergency diesel fire pump [PTI 14-04682, 8/24/2004].

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

3. The permittee shall ensure that any CAIR NO_X, SO_2, or NO_X ozone season units complies with the requirements of OAC 3745-109, which includes submitting timely permit applications. The permittee shall ensure that the affected emissions units comply with those requirements as outlined in the permit application submitted as required by OAC rules 3745-109-03, 109-10 and 109-16 for the affected emissions units.

   The permittee shall also comply with any subsequent federally mandated programs that may replace the CAIR program affecting electric generating facilities.

   Note: Ohio EPA DAPC has completed proposed rule amendments for OAC chapter 3745-14, specifically, OAC rule 3745-14-01 and OAC rule 3745-14-06, which facilitated the transition of the affected units from OAC chapter 3745-14 into the federal Clean Air Interstate Rule (CAIR) program which began with the 2009 control periods. This began the process of "sunsetting" the parts of OAC chapter 3745-14 which were no longer needed as a result of Ohio's CAIR rules (OAC chapter 3745-109).

   [Authority for term: OAC rules 3745-77-07(A)(5) and 3745-109]

4. <u>Transport Rule (TR) Trading Program Requirements</u>

   a) The permittee shall comply with all applicable Cross-State Air Pollution Rule (CSAPR) requirements (40 CFR Part 97, Subparts AAAAA – DDDDD) by the compliance date specified in 40 CFR 97, Subparts AAAAA – DDDDD.

   b) The TR subject units, and the unit-specific monitoring provisions at this source, are identified in the following table. These units are subject to the requirements for the TR NOX Annual Trading Program and TR NOX Ozone Season Trading Program.

Unit ID:
P001 84.65 MW simple-cycle combustion turbine No. 1
P002 84.65 MW simple-cycle combustion turbine No. 2
P003 84.65 MW simple-cycle combustion turbine No. 3
P004 84.65 MW simple-cycle combustion turbine No. 4

P005 84.65 MW simple-cycle combustion turbine No. 5 P006 84.65 MW simple-cycle combustion turbine No. 6 P007 84.65 MW simple-cycle combustion turbine No. 7 P008 84.65 MW simple-cycle combustion turbine No. 8					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO_2 monitoring) and 40 CFR part 75, subpart H (for NO_X monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75,appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO_2					
NO_X	x				
Heat input					

c) The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (TR NOX Annual Trading Program), and 97.530 through 97.535 (TR NOX Ozone Season Trading Program), as applicable]. The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable TR trading programs.

d) Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at http://www.epa.gov/airmarkets/emissions/monitoringplans.html.

e) Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (TR NOx Annual Trading Program), and 97.535 (TR NOx Ozone Season Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html

f) Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (TR NOX Annual Trading Program), and 97.530 through 97.534 (TR NOX Ozone Season Trading Program) must submit

to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (TR NOX Annual Trading Program), and 97.535 (TR NOX Ozone Season Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.

g) The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (TR NOX Annual Trading Program), 97.530 through 97.534 (TR NOX Ozone Season Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add to or change this unit's monitoring system description.

h) TR NOx Annual Trading Program requirements

Designated representative requirements	97.406(a), 97.413-97.418
Emissions monitoring, reporting and recordkeeping requirements	97.406(b), 97.430-97.435
NOx emissions requirements	97.406(c)
Title V permit revision requirements	97.406(d)
Additional recordkeeping and reporting requirements	97.406(e)
Liability	97.406(f)
Effect on other authorities	97.406(g)

i) TR NOx Ozone Season Trading Program requirements

Designated representative requirements	97.506(a), 97.513-97.518
Emissions monitoring, reporting and recordkeeping requirements	97.506(b), 97.530-97.535
NOx emissions requirements	97.506(c)
Title V permit revision requirements	97.506(d)
Additional recordkeeping and reporting requirements	97.506(e)
Liability	97.506(f)
Effect on other authorities	97.506(g)

[Authority for term: 40 CFR Part 97]

5. Acid Rain Permits and Compliance – 40 CFR Part 72, 40 CFR Part 75, and OAC Chapter 3745-103

The permittee shall ensure that any affected emissions unit complies with the requirements of 40 CFR Part 72, 40 CFR Part 75, and OAC Chapter 3745-103, which includes submitting timely permit applications. Emissions exceeding any allowances that are lawfully held pursuant to these rules are prohibited.

[Authority for term: 40 CFR Part 72, 40 CFR Part 75, OAC rule 3745-103, and PTI 14-04682]

6. All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR Part 61, Subpart M, and OAC Chapter 3745-20.

[Authority for term: 40 CFR Part 61, Subpart M,and OAC rule 3745-20-02]

7. The facility is subject to the applicable requirements specified in OAC Chapter 3745-25 for Ambient Air Quality Emergency Episodes. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-04, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

   [Authority for term: OAC Chapter 3745-25]

8. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subparts A and ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines: P009, P010, and P011. At this time the Ohio EPA is not accepting the delegating authority to enforce NESHAP standards for area sources. The requirements of this rule, that are applicable to the area source(s) (for hazardous air pollutants) identified in this permit, shall be enforceable by U.S. EPA. Region 5. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website http://www.ecfr.gov/ or by contacting the appropriate Ohio EPA District Office or Local Air Agency.

   [Authority for term: 40 CFR Part 63]

9. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subparts A and GG, Standards of Performance for Stationary Gas Turbines (NSPS): P001 - P008. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

   [Authority for term: 40 CFR Part 60]

10. The following abbreviations are used throughout this permit:

    NOx = Nitrogen oxides

    CO = Carbon monoxide

    VOC = Volatile organic compounds

    PE = Particulate emissions as measured by the applicable test methods in 40 CFR Part 60, Appendix A, “Standards of Performance for New Stationary Sources”

    PM_{10} = Particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers as measured either by a reference method that is based on 40 CFR Part 50, Appendix J and designated in accordance with 40 CFR Part 53 or by an equivalent method designated in accordance with 40 CFR Part 53

    SO_2 = Sulfur dioxide

    H_2SO_4 = Sulfuric acid

    O_2 = Oxygen

TPY = Tons per year

MMBtu = Million British thermal units

PTI = Permit to Install

CFR = Code of Federal Regulations

OAC = Ohio Administrative Code

ORC = Ohio Revised Code

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group - CT Group: P001, P002, P003, P004, P005, P006, P007, P008

EU ID	Operations, Property and/or Equipment Description
P001	84.65 Megawatt (Nominal) Simple-Cycle Combustion Turbine No. 1
P002	84.65 Megawatt (Nominal) Simple-Cycle Combustion Turbine No. 2
P003	84.65 Megawatt (Nominal) Simple-Cycle Combustion Turbine No. 3
P004	84.65 Megawatt (Nominal) Simple-Cycle Combustion Turbine No. 4
P005	84.65 Megawatt (Nominal) Simple-Cycle Combustion Turbine No. 5
P006	84.65 Megawatt (Nominal) Simple-Cycle Combustion Turbine No. 6
P007	84.65 Megawatt (Nominal) Simple-Cycle Combustion Turbine No. 7
P008	84.65 Megawatt (Nominal) Simple-Cycle Combustion Turbine No. 8

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20; and 40 CFR Part 52.21 Attainment Provisions for Prevention of Significant Deterioration (PSD) [PTI 14-04682, issued 8/24/2004]	Total combined emissions from combustion turbines P001 through P008 at all load conditions, for all fuels combusted, including start up and shut down, shall not exceed the following emission limitations: 60.5 TPY of PE and PM_{10}, based on a rolling, 12-month summation; 120.8 TPY of SO_2, based on a rolling, 12-month summation; 733.3 TPY of NO_X, based on a rolling, 12-month summation; 541.0 TPY of CO, based on a rolling, 12-month summation; 12.2 TPY of H_2SO_4 mist, based on a rolling, 12-month summation;

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		7.7 TPY of benzene, based on a rolling, 12-month summation; 0.00084 TPY of beryllium, based on a rolling, 12-month summation; and 0.012 TPY of arsenic, based on a rolling, 12-month summation. The following emission limitations for NO_X from each emissions unit shall not be exceeded: 196.0 pounds per hour of NO_X, excluding startup and shutdown periods; when burning natural gas, at full load, NO_X emissions shall not exceed 12 ppm by volume, at 15% oxygen on a dry basis, based on a rolling 12-month average summation of the monthly NO_X emissions in ppm; when burning diesel fuel, at full load, NO_X emissions shall not exceed 42 ppm by volume, at 15% oxygen on a dry basis, as a 1-hour average; and when burning natural gas, at full load, NO_X emissions shall not exceed 15 ppm by volume, at 15% oxygen on a dry basis, as a 1-hour average. The following emission limitations for SO_2 from each emissions unit shall not be exceeded: 58.0 pounds per hour*; and when burning diesel fuel, emissions of SO_2 shall not exceed 0.0456 pound per MMBtu of actual heat input. Emissions of H_2SO_4 mist from each emissions unit shall not exceed 6.0 pounds per hour*.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Emissions of PE/PM_{10} from each emissions unit shall not exceed 0.008 pound per MMBtu*. Emissions of CO from each emissions unit shall not exceed 54.0 pounds per hour, excluding startup and shutdown periods. *The pound per hour emission limitations for SO_2 and H_2SO_4, and the pound per MMBtu emission limitations for PE/PM_{10} are based on the emissions unit's potential to emit (PTE). Therefore no hourly (short term) records are required to demonstrate compliance with these limitations. For PE/PM_{10}, SO_2, NOx, CO, and H_2SO_4 mist, beryllium, arsenic, and benzene, best available technology is equivalent to best available control technology. See b(2)a. - b)(2)h., and c)(1) – c)(6).
b.	OAC rule 3745-31-05(A)(3) [PTI 14-04682, issued 8/24/2004]	Emissions of VOC from each emissions unit shall not exceed 10.0 pounds per hour*. Emissions of lead from each emissions unit shall not exceed 0.15 TPY**. Emissions of mercury from each emissions unit shall not exceed 0.0023 TPY**. Visible particulate emissions from any stack associated with the combustion turbines shall not exceed 10 percent opacity, as a six-minute average, when combusting natural gas. Compliance with this rule also includes compliance with the requirements of OAC rule 3745-31-05(D) and OAC rule 3745-17-07(A)(1) when burning diesel fuel.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		*The pound per hour emission limitation for VOC is based on the emissions unit's potential to emit (PTE). Therefore no hourly records are required to demonstrate compliance with this limitation. **Compliance with the fuel usage restrictions in c)(1) and c)(2) ensures compliance with the TPY emission limitations for lead and mercury from each emissions unit.
c.	OAC rule 3745-31-05(D) [PTI 14-04682, issued 8/24/2004] Synthetic Minor for VOC to avoid Emissions Offsets.	Emissions of VOC from combustion turbines P001 through P008, combined, for all fuels and load conditions, shall not exceed 36.4 TPY based on a rolling, 12-month summation.
d.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack serving these emissions units shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule. When combusting natural gas, the emission limitation specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-11(B)(4)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to 40 CFR Part 52.21 and OAC rules 3745-31-10 through 3745-31-20.
f.	OAC rule 3745-18-06(F)	The SO_2 emission limitation specified by this rule is less stringent than the SO_2 emission limitation established pursuant to 40 CFR Part 52.21 and OAC rules 3745-31-10 through 3745-31-20.
g.	40 CFR Part 60, Subpart GG	The emission limitations established in 40 CFR Part 60, Subpart GG for SO_2 and NO_X are less stringent than those established pursuant to 40 CFR Part 52.21 and OAC rules 3745-31-10 through 3745-31-20. See b)(2)l.

(2) Additional Terms and Conditions

a. The requirements of 40 CFR 52.21 and OAC rules 3745-31-10 through 3745-31-20 in b)(1)a. above as established in PSD PTI 14-04682 are equivalent to Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

b. The permittee shall operate and maintain dry low NO_X burners when burning natural gas and operate and maintain a water injection system when burning diesel fuel.

c. The emissions from startup and shutdown operations shall not exceed the following emission limitations:

Pollutant	When burning natural gas	When burning diesel fuel
NO_X	83 pounds per cycle	130 pounds per cycle
CO	308 pounds per cycle	354 pounds per cycle

d. Compliance with the startup and shutdown NOx and CO pounds per cycle emission limitations, the NO_X and CO emissions limitations during steady-state operations, and the NO_X ppm emission limitation during full load operations shall be demonstrated by the use of dual range NO_X and CO continuous emission monitoring systems (CEMS). For CEM systems with dual ranges, certification testing shall be performed on the range normally used for measuring emissions.

e. “Full load” shall be defined as the nameplate electrical output of 84.65 megawatts. Any load that is greater than or equal to 90% of the nameplate electrical output shall be considered full load.

f. “Normal operation” shall be defined as the period when the combustion turbine achieves dry low NO_X mode (GE Mode 6). GE Mode 6 is defined by the manufacturer as the low emissions mode during which all burner nozzles are in use, burning a lean pre-mixed gas for steady-state operation. The continuous emission monitoring system will indicate and record the GE Mode 6 status of the combustion turbine, including when the emissions unit is shutdown and when operating in startup and shutdown modes.

g. “Startup” shall be defined as the period between when the combustion turbine is initially started (initial fuel light-off) until the combustion turbine completes transition to GE Mode 6. “Shutdown” shall be defined as the period beginning when the combustion turbine leaves GE Mode 6 and ending when combustion has ceased. “Startup and shutdown cycle” shall be defined as a startup period followed by a consecutive shutdown period.

h. For the purpose of this permit, the term “diesel fuel” shall be considered to be any low sulfur fuel oil that is burned as defined in 40 CFR Part 72.2.

i. In lieu of the requirements of 40 CFR Part 60.334(a) to install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in each combustion turbine, P001 through P008, the permittee shall operate and maintain systems to continuously monitor and record emissions of NO_X for each combustion turbine, P001 through P008, in accordance with this permit.

j. In lieu of the excess emission reports required under 40 CFR Part 60.334, the permittee shall submit excess emission reports for each combustion turbine, P001 through P008, in accordance with this permit.

k. In lieu of the test methods and procedures required under 40 CFR Part 60.335, the permittee shall follow the monitoring and testing requirements for each combustion turbine, P001 through P008, in accordance with this permit.

l. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable. Except as provided for in the terms and conditions of this permit and the underlying PTI 14-04682, the permittee is not exempt from meeting any additional requirements of 40 CFR Part 60 Subpart GG.

c) Operational Restrictions

(1) The maximum annual natural gas usage rate for emissions units P001 through P008, combined, shall not exceed 20,300,000,000 cubic feet per rolling, 12-month period.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

(2) The maximum annual diesel fuel usage rate for emissions units P001 through P008, combined, shall not exceed 34,000,000 gallons per rolling, 12-month period.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

(3) The permittee shall burn only pipeline quality natural gas or diesel fuel in emissions units P001 through P008.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

(4) The quality of diesel fuel burned in emissions units P001 through P008 shall have a combination of heat and sulfur content which is sufficient to comply with the allowable SO_2 emission limitation of 0.0456 pound of SO_2 per MMBtu of actual heat input.

The natural gas and diesel fuel burned in emissions units P001 through P008 shall have a sulfur content of 0.05% by weight or less.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

(5) When the emissions unit is operating in startup and shutdown conditions, as defined in b)(2)g., each startup and shutdown cycle shall not exceed 1.0 hour in duration.

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

(6) With the exception of startup and shutdown, each combustion turbine, P001 through P008, shall be operated in GE Mode 6, defined as normal or full load operation (see b)(2)e. and b)(2)f. above).

(Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain daily records of the following information for each emissions unit, P001 through P008:

a. The emissions unit's actual electrical output for each operating hour; and

b. For each day during which the permittee burns a fuel other than pipeline quality natural gas and/or diesel fuel, the permittee shall maintain a record of the type and quantity of fuel burned in each emissions unit.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

(2) The permittee shall maintain monthly records of the following information:

a. The total amount of natural gas burned, in cubic feet, in each emissions unit;

b. The total amount of diesel fuel burned, in gallons, in each emissions unit;

c. The total amount of natural gas burned, in cubic feet, for emissions units P001 through P008, combined;

d. The total amount of diesel fuel burned, in gallons, for emissions units P001 through P008, combined;

e. The rolling, 12-month summation of the total amount of natural gas burned, in cubic feet, for emissions units P001 through P008, combined (the amount of natural gas burned for the current month plus the amount of natural gas burned for the previous 11 calendar months);

f. The rolling, 12-month summation of the total amount of diesel fuel burned, in gallons, for emissions units P001 through P008, combined (the amount of diesel fuel burned for the current month plus the amount of diesel fuel burned for the previous 11 calendar months);

g. The date and duration, in minutes, of each startup and shutdown cycle for each emissions unit;

h. The emissions, in pounds, of NO_X* and CO* when burning natural gas for each startup and shutdown cycle for each emissions unit;

i. The emissions, in pounds, of NO_X* and CO* when burning diesel fuel for each startup and shutdown cycle for each emissions unit;

j. The total emissions, in tons, of NO_X*, CO*, PE/PM_{10}, SO_2, VOC, H_2SO_4, and benzene when burning natural gas for all operating conditions for emissions units P001 through P008, combined**;

k. The total emissions, in tons, of NO_X*, CO*, PE/PM_{10}, SO_2, VOC, H_2SO_4, and benzene, beryllium, and arsenic when burning diesel fuel for all operating conditions for emissions units P001 through P008, combined**;

l. The rolling, 12-month emissions, in tons, of NO_X*, CO*, PE/PM_{10}, SO_2, VOC, H_2SO_4, benzene, beryllium, and arsenic for emissions units P001 through P008, combined, when burning natural gas and diesel fuel (the total emissions calculated in j. plus k. for the current month plus the total emissions for the previous 11 calendar months)**;

m. The updated rolling, 12-month average of NO_X* emissions, in ppm, when burning natural gas at full load for each emissions unit [the NO_X ppm average for the current month (from the CEM data) plus the total NO_X ppm average for the previous 11 calendar months].

*The permittee shall use the continuous NO_X and CO emission monitoring data to determine the NO_X and CO emissions for these emissions units. During any period when the NO_X and/or the CO emission monitoring systems are not operational, the permittee shall use the appropriate missing data procedures specified in 40 CFR Part 75 to determine the NO_X and/or CO emissions or an approved data substitution protocol. The data substitution values shall not be used to demonstrate compliance with the hourly NO_X and CO emission limitations applicable during normal operation of each emissions unit.

**The PE/PM_{10}, SO_2, VOC, H_2SO_4, benzene, beryllium, and arsenic, calculations shall be based on the fuel usage information collected in d)(2)a. and d)(2)b. and the emission factors found in f)(1)d.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

(3) The permittee shall monitor and record the sulfur content of the natural gas being burned in each combustion turbine, P001 through P008 or make the demonstration that the sulfur content of the natural gas does not need to be monitored and recorded in accordance with the provisions specified in 40 CFR Part 60.334(h). Owners, operators or fuel vendors may develop custom fuel schedules for the determination of the sulfur content based on the design and operation of the affected facility and the characteristics

of the fuel supply. Except as provided in 40 CFR Parts 60.334(i)(3)(i) and 60.334(i)(3)(ii), these custom schedules shall be substantiated with data and must be approved by the Ohio EPA, Central Office before they can be used.

Analyses for the purpose of determining the sulfur content of the natural gas may be performed by the permittee, the fuel vendor, or any other qualified agency in accordance with the analytical methods specified in 40 CFR Part 60, Subpart GG, Section 60.335(d) or equivalent methods as approved by the Administrator.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

(4) The permittee shall maintain records of the diesel fuel oil burned in each emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

Alternative 1:

For each shipment of diesel fuel oil received for burning in each emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

Alternative 2:

The permittee shall collect a representative grab sample of diesel fuel oil that is burned in each emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving each emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in each emissions unit. A representative grab sample of oil does not need to be collected on days when the emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20, OAC rule 3745-18-04(E)(3), and OAC rule 3745-18-04(I))

(5) The permittee shall operate and maintain equipment to continuously monitor and record the actual fuel flow rate for each emissions unit in order to stoichiometrically calculate emissions of NO_X and CO, in pounds per hour. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75. Fuel heat content values for each fuel burned, as applied in the stoichiometric calculations, shall also be recorded. The permittee shall maintain records of data obtained by the fuel flow monitor/meter, including the dates and results of each calibration check and the magnitude of calibration adjustments; periods of downtime and malfunction of the fuel flow monitor/meter; as well as, the reason (if known) and the corrective actions taken (if any) for each such event. If the fuel flow monitoring and/or recording equipment is (are) not in service when the emissions unit is in operation, the permittee shall comply with the appropriate missing data procedures specified in 40 CFR Part 75.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, and 40 CFR Part 75)

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR Part 60.13, 40 CFR Part 60, Appendix F, and 40 CFR Part 75)

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

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR Part 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 75)

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

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

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR Part 60.13, 40 CFR Part 60, Appendix F, and 40 CFR Part 75)

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

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

b. emissions of NO_X in pounds per hour and in units of the applicable standard(s) in the appropriate averaging period;

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

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

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

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

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

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

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

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR Part 60.13, 40 CFR Part 60, Appendices B & F, and 40 CFR Part 75)

(10) The permittee shall operate and maintain equipment to continuously monitor and record O_2 emitted from this emissions unit in percent O_2 (as a 1-hour average). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60 and Part 75. The monitoring and recording equipment shall be calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, and 40 CFR Part 75)

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

The continuous O_2 monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, and 40 CFR Part 75)

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

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

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

Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, and 40 CFR Part 75)

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

a. the percent O_2 for each cycle time of the analyzer, with no resolution less than one data point per minute required, and the percent O_2 as a 1-hr average;

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

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

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

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

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

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

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

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

Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, and 40 CFR Part 75)

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR Part 60.13, 40 CFR Part 60, Appendix F, and 40 CFR Part 75)

(15) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous dual-range carbon monoxide (CO) monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate), and the accuracy requirements of Specification 6. The permittee shall document that the fuel flow monitor/meter meets 40 CFR 75 certification requirements prior to the performance specification test, and shall demonstrate how the pound per hour emission of CO is being calculated stoichiometrically. The letter(s)/document(s) of certification under 40 Part 60 shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR Part 60.13, 40 CFR Part 60, Appendix B, and 40 CFR Part 75)

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

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

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR Part 60.13, 40 CFR Part 60, Appendix F, and 40 CFR Part 75)

(17) The permittee shall maintain records of data obtained by the continuous dual-range CO monitoring system including, but not limited to:

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

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

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

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

f. hours of operation of the emissions unit and continuous dual-range CO monitoring system;

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

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

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

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR 60.13, and 40 CFR Part 60, Appendices B & F)

(18) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #14-04682, issued on 8/24/2004:d)(1) through d)(17). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

(1) The permittee shall submit quarterly reports that identify each period during which an exemption for ice-fog provided in 40 CFR Part 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.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

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

a. All exceedances of the rolling, 12-month natural gas usage limitation for emissions units P001 through P008, combined;

b. All exceedances of the rolling, 12-month emission limitations for PE/PM_{10}, SO_2, NO_X, CO, H_2SO_4 mist, VOC, benzene, beryllium, and arsenic for emissions units P001 through P008, combined;

c. All exceedances of the sulfur content restriction (i.e., 0.05% by weight) for the fuels (natural gas and diesel fuel) received for burning in each emissions unit;

d. All exceedances of the SO_2lbs/MMBtu emission limitation when burning diesel fuel in each emissions unit;

e. All exceedances of the 1.0 hour startup and shutdown cycle operational restriction;

f. All exceedances of the rolling, 12-month diesel fuel usage limitation for emissions units P001 through P008, combined;

g. All exceedances of the startup and shutdown emission limitations specified in b)(2)c. when burning natural gas;

h. All exceedances of the startup and shutdown emission limitations specified in b)(2)c. when burning diesel fuel;

i. Each day when a fuel other than natural gas or diesel fuel was burned in any emissions unit.

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

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

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

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

excess of any applicable limit specified in this permit, 40 CFR Part 60, 40 CFR Parts 75 and 76, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

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

i. the facility name and address;

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

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

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

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

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

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

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

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

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

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

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

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

Each report shall address the operations conducted and data obtained during the previous calendar quarter. Data substitution procedures from 40 CFR 75 are not to be

used for showing compliance with the hourly emission limitations in this permit as noted in term d)(2).

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

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR 60.7, and 40 CFR Part 75)

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

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

(5) The permittee shall comply with the following quarterly reporting requirements for each emissions unit and its continuous dual-range CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

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

i. the facility name and address;

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

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

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

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

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

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

viii. results and dates of quarterly cylinder gas audits;

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

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

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

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

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

Each report shall address the operations conducted and data obtained during the previous calendar quarter. Data substitution procedures from 40 CFR 75 are not to be used for showing compliance with the hourly emission limitations in this permit as noted in term d)(2).

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

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR 60.7, and 40 CFR Part 75)

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

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

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

i. the facility name and address;

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

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

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

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

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

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

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

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

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

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

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

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

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 60 Subpart GG, 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, and 40 CFR Part 75)

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

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 75)

(8) The permittee shall submit annual reports that specify the total mercury and lead emissions from each emissions unit, P001 through P008, for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for each emissions unit, P001 through P008, in the annual Title V Fee Emissions Report.

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

(9) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #14-04682, issued on 8/24/2004: e)(1) through e)(8). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitations:

Hourly emissions from each combustion turbine shall not exceed:

i. 10.0 pounds of VOC per hour;

ii. 58.0 pounds of SO_2 per hour; and

iii. 6.0 pounds of H_2SO_4 per hour.

Applicable Compliance Methods:

The hourly emission limitations represent each emissions unit's potential to emit (PTE) and are based upon the manufacturer's guaranteed emission data from the application submitted April 26, 1999 for PTI 14-04682.

If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation through emission tests performed in accordance with Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A.

If required, the permittee shall demonstrate compliance with the hourly SO_2 emission limitation through emission tests performed in accordance with Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A.

If required, the permittee shall demonstrate compliance with the hourly H_2SO_4 emission limitation through emission tests performed in accordance with Methods 1 through 4 and 8 of 40 CFR Part 60, Appendix A.

Alternative USEPA-approved test methods may be used with prior approval from the Ohio EPA.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

b. Emission Limitations:

196.0 pounds of NO_X per hour, excluding periods of startup and shutdown;

83 pounds of NO_X per startup and shutdown cycle when burning natural gas; and

130 pounds of NO_X per startup and shutdown cycle when burning diesel fuel.

Applicable Compliance Method:

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

The NO_X emission limitations per startup and shutdown cycle were established based on emissions data contained in the modification application submitted in March 2001 for PTI 14-04682, issued as a modification on 8/24/2004, and the emission factors from the background document, Reference 16, for Stationary Gas Turbines in AP-42, Fifth Edition, Section 3.1, dated April 2000.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR 60.13, 40 CFR Part 60, Appendices B & F, and 40 CFR Part 75)

c. Emission Limitations:

54.0 pounds of CO per hour, excluding periods of startup and shutdown;

308 pounds of CO per startup and shutdown cycle when burning natural gas; and

354 pounds of CO per startup and shutdown cycle when burning diesel fuel.

Applicable Compliance Method:

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

The CO emission limitations per startup and shutdown cycle were established based on emissions data contained in the modification application submitted in March 2001 for PTI 14-04682, issued as a modification on 8/24/2004, and the emission factors from the background document, Reference 16, for Stationary Gas Turbines in AP-42, Fifth Edition, Section 3.1, dated April 2000.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR 60.13, 40 CFR Part 60, Appendices B & F, and 40 CFR Part 75)

d. Emission Limitations:

The total emissions from emissions units P001 through P008, combined, shall not exceed the following emissions limitations:

i. 36.4 TPY of VOC based on a rolling, 12-month summation;

ii. 60.5 TPY of PE/PM_{10} based on a rolling, 12-month summation;

iii. 120.8 TPY of SO_2 based on a rolling, 12-month summation;

iv. 733.3 TPY of NO_X based on a rolling, 12-month summation;

v. 541.0 TPY of CO based on a rolling, 12-month summation;

vi. 12.2 TPY of H_2SO_4 based on a rolling, 12-month summation;

vii. 7.7 TPY of benzene based on a rolling, 12-month summation;

viii. 0.00084 TPY of beryllium based on a rolling, 12-month summation; and

ix. 0.012 TPY of arsenic based on a rolling, 12-month summation.

Applicable Compliance Methods:

Compliance with the rolling, 12-month emission limitations shall be demonstrated by the recordkeeping requirements in d)(2).

Emission factors for PE/PM_{10}, VOC, SO_2, and H_2SO_4, are specified in the manufacturers guaranteed performance data contained in the application submitted April 26, 1999 for PTI 14-04682.

For benzene, beryllium, and arsenic, the emission factors as specified in AP-42, Fifth Edition, Section 3.1 "Stationary Gas Turbines", updated in April 2000 are 0.000011 pound of arsenic per MMBtu, 0.000055 pound of benzene per MMBtu, and 0.00000031 pound of beryllium per MMBtu, from diesel fuel-fired turbines. The emission factor as specified in AP-42, Fifth Edition, Section 3.1 "Stationary Gas Turbines", updated in April 2000 is 0.000012 pound of benzene per MMBtu, from natural gas-fired turbines. The emission factor for beryllium and arsenic when natural gas is burned is insignificant based upon the manufacturer's guaranteed emission data contained in the application submitted April 26, 1999 for PTI 14-04682.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

e. Emission Limitations:

0.15 TPY of lead emissions; and

0.0023 TPY of mercury emissions.

Applicable Compliance Methods:

The lead and mercury emission limitations specified above were determined by multiplying the maximum fuel usage capacity of the equipment, as provided by the manufacturer in the application submitted April 26, 1999 for PTI 14-04682, by the pollutant specific emission factor found in AP-42, Fifth Edition, Section 3.1, "Stationary Gas Turbines", updated in April 2000, by the maximum heat content of the fuel, and dividing by 2000 pounds per ton. The emission factors as specified in the above referenced AP-42 are 0.000014 pound of lead per MMBtu and 0.0000012 pound of mercury per MMBtu from diesel fuel-fired turbines.

The emission factor for mercury and lead when natural gas is burned is insignificant based upon the manufacturer's guaranteed emission data contained in the application submitted April 26, 1999 for PTI 14-04682.

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

f. Emission Limitations:

When burning natural gas at full load, NO_X emissions shall not exceed 15 ppm by volume, at 15% oxygen on a dry basis, as a 1-hour average;

When burning diesel fuel at full load, NO_X emissions shall not exceed 42 ppm by volume, at 15% oxygen on a dry basis, as a 1-hour average; and

When burning natural gas at full load, NO_X emissions shall not exceed 12 ppm, by volume, at 15% oxygen on a dry basis, based on a rolling, 12-month summation of the average monthly NO_X emissions in ppm.

Applicable Compliance Methods:

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

If required, the permittee shall demonstrate compliance with the non-rolling ppm NOx emission limitations through emission tests performed in accordance with Method 1 through 4 and 7 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, 40 CFR 60.13, 40 CFR Part 60, Appendices B & F, and 40 CFR Part 75)

g. Emission Limitation:

0.008 pound of PE/PM_{10} per MMBtu.

Applicable Compliance Method

The emission limitation above represents each emissions unit's potential to emit (PTE) and is based upon the manufacturer's guaranteed emission data from the application submitted April 26, 1999 for PTI 14-04682.

If required, the permittee shall demonstrate compliance with the PE/PM_{10} emission limitation through emission tests performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

h. Emission Limitation:

0.0456 pound of SO_2 per MMBtu when burning diesel fuel.

Applicable Compliance Method:

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by the sulfur analysis of the diesel fuel combusted pursuant to the requirements in d)(4) and by documenting that the sulfur content of each shipment of oil received during a calendar month meets the limitation specified in c)(4).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

i. Emission Limitation:

Visible particulate emissions from any stack associated with these emissions units shall not exceed 10% opacity, as a 6-minute average, when burning natural gas.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

No visible emissions observations are specifically required to demonstrate compliance with this emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

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

j. Emission Limitation:

When burning diesel fuel, visible particulate emissions from any stack associated with these emissions units shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

No visible emissions observations are specifically required to demonstrate compliance with this emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-17-07(A), and OAC rule 3745-17-03(B)(1)(a))

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #14-04682, issued on 8/24/2004: f)(1)a. through f)(1)j. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.

2. Emissions Unit Group - EDG Group: P009, P010

EU ID	Operations, Property and/or Equipment Description
P009	1.5 Megawatt (17.21 MMBtu/hr) Emergency Diesel Generator No.1
P010	1.5 Megawatt (17.21 MMBtu/hr) Emergency Diesel Generator No. 2

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rules 3745-31-10 through 3745-31-20; and 40 CFR Part 52.21 [PTI 14-04682, issued 8/24/2004] Attainment Provisions for Prevention of Significant Deterioration (PSD)	See b)(2)b.i.-iv. and c)(1).
b.	OAC rule 3745-31-05(D) [PTI 14-04682, issued 8/24/2004] Synthetic Minor for VOC to avoid Emissions Offsets	See b)(2)b.v. and c)(1).
c.	OAC rule 3745-31-05(A)(3) [PTI 14-04682, issued 8/24/2004]	For PE, PM_{10}, SO2, NOx, and CO, best available technology (BAT) requirements are equivalent to the best available control technology (BACT) requirements established pursuant to 3745-31-10 through 3745-31-20 and 40 CFR Part 52.21. See b)(2)a. The requirements of this rule also include

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-17-11(B)(5)(b), OAC rule 3745-18-06(G), and OAC rule 3745-31-05(D).
d.	OAC rule 3745-17-07(A)	Visible particulate emissions from the stack serving each emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
e.	OAC rule 3745-17-11(B)(5)(b)	PE from each diesel generator shall not exceed 0.062 pound per MMBtu of actual heat content.
f.	OAC rule 3745-18-06(G)	SO_2 emissions from each emissions unit shall not exceed 0.5 pound per MMBtu of actual heat input.
g.	40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580-6675] National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) [In accordance with 40 CFR 63.6590 and 63.6675, this emissions unit is an existing emergency compression ignition stationary RICE >500 hp located at an area source.]	Comply with the work practices specified in b)(2)c. pursuant to Table 2d of Subpart ZZZZ. [40 CFR 63.6640] See b)(2)c. and c)(4).
h.	40 CFR Part 63.1-15 [40 CFR 63.6665]	Table 8 to 40 CFR Part 63, Subpart ZZZZ – Applicability of General Provisions (Subpart A) to Subpart ZZZZ shows which parts of the General Provisions in 40 CFR Part 63.1-15 apply.

(2) Additional Terms and Conditions

a. Emissions from each emissions unit shall not exceed:

i. 8.61 pounds of SO_2 per hour;

ii. 55.07 pounds of nitrogen oxides (NO_X) per hour;

iii. 14.63 pounds of carbon monoxide (CO) per hour; and

iv. 1.55 pounds of volatile organic compounds (VOC) per hour.

The hourly emission limitations represent the potential to emit (PTE) for each emissions unit. Therefore, no additional monitoring, recordkeeping or reporting requirements are required to demonstrate compliance with these emission limitations.

b. Emissions from each emissions unit shall not exceed:

i. 0.27 TPY of PE, based upon a rolling, 12-month summation of the monthly emissions;

ii. 2.15 TPY of SO_2, based upon a rolling, 12-month summation of the monthly emissions;

iii. 13.77 TPY of NO_X, based upon a rolling, 12-month summation of the monthly emissions;

iv. 3.66 TPY of CO, based upon a rolling, 12-month summation of the monthly emissions; and

v. 0.39 TPY of VOC, based upon a rolling, 12-month summation of the monthly emissions.

c. The permittee shall comply with the following requirements of 40 CFR Part 63, Subpart ZZZZ, Table 2d for emergency stationary compression ignition (CI) RICE:

i. change oil and filter every 500 hours of operation or annually, whichever comes first;

ii. inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

iii. inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

c) Operational Restrictions

(1) The maximum annual operating hours for each emissions unit shall not exceed 499 hours, based upon a rolling, 12-month summation of the operating hours.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through 3745-31-20)

(2) The quality of diesel fuel burned in each emissions unit shall have a combination of heat and sulfur content that is sufficient to comply with the allowable SO_2 emission limitation.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(A)(3), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

(3) The permittee shall burn only diesel fuel in each emissions unit. For the purpose of this permit, the term "diesel fuel" shall be considered to be any low sulfur fuel oil that is burned as defined in 40 CFR Part 72.2.

(Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

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

63.6605(a) and (b)	general duty to minimize emissions
63.6604(b)	requirements for use of nonroad diesel fuel
63.6625(h)	requirements for startup, not to exceed 30 minutes
63.6640(f)	operating requirements for emergency stationary RICE

(Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart ZZZZ)

d) Monitoring and/or Recordkeeping Requirements

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

a. The operating hours for each month; and

b. The rolling, 12-month summation of the operating hours.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

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

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

(3) The permittee shall maintain records of the oil burned in each emissions unit, in accordance with either Alternative 1 or Alternative 2 described below:

Alternative 1:

For each shipment of oil received for burning in the emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission

rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in the emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank(s) serving the emissions unit, on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in the emissions unit. A representative grab sample of oil does not need to be collected on days when the emissions unit is only operated for the purpose of "test firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods, such as ASTM methods D240 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter and D4294, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, or equivalent methods as approved by the Director.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), 40 CFR Part 52.21, OAC rule 3745-31-10 through OAC rule 3745-31-20, OAC rule 3745-18-04(E)(3) and OAC rule 3745-18-04(I))

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

63.6625(e)	manufacturer's instructions/maintenance plan requirements
63.6625(f)	installation requirements for non-resettable hour meter
63.6625(i)	optional engine oil analysis program requirements
63.6655(a) and (e)	required overall records to be maintained
63.6660	record format and retention requirements

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

(5) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #14-04682, issued on 8/24/2004:d)(1) through d)(4). The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

e) Reporting Requirements

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

a. Each day when a fuel other than diesel was burned in each emissions unit;

b. Any exceedances of the rolling, 12-month hours of operation limitation; and

c. Any exceedance of the allowable pounds of SO_2/MMBtu actual heat input limitation.

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

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

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

63.6630(c) and 63.6645	requirements for notification reports
63.6640(b)	submission of deviation reports
63.6650(f)	Title V monitoring report allowance

(Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart ZZZZ)

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #14-04682, issued on 8/24/2004: e)(1) and e)(2). The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

f) Testing Requirements

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

a. Emission Limitations:

8.61 pounds of SO_2 per hour;

55.07 pounds of NO_X per hour;

14.63 pounds of CO per hour; and

1.55 pounds of VOC per hour.

Applicable Compliance Methods:

The hourly SO_2 emission limitation was established by multiplying the emission factor of 1.01(S) pound of SO_2 per million Btu (where "S" is the % sulfur in the diesel fuel) by the emissions unit's maximum heat input capacity of 17.21 million Btu per hour.

The hourly NO_X emission limitation was established by multiplying the emission factor of 3.2 pounds of NO_X per million Btu by the emissions unit's maximum heat input capacity of 17.21 million Btu per hour.

The hourly CO emission limitation was established by multiplying the emission factor of 0.85 pound of CO per million Btu by the emissions unit's maximum heat input capacity of 17.21 million Btu per hour.

The hourly VOC emission limitation was established by multiplying the emission factor of 0.09 pound of VOC per million Btu by the emissions unit's maximum heat input capacity of 17.21 million Btu per hour.

The emission factors specified above for each pollutant were obtained from AP-42, Fifth Edition, Chapter 3, Section 3.4, "Large Stationary Diesel Engines", Table 3.4-1, 10/96.

If required, the permittee shall demonstrate compliance with the hourly SO_2 emission limitation through emission tests performed in accordance with Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A.

If required, the permittee shall demonstrate compliance with the hourly NO_X emission limitation through emission tests performed in accordance with Methods 1 through 4 and 7 of 40 CFR Part 60, Appendix A.

If required, the permittee shall demonstrate compliance with the hourly CO emission limitation through emission tests performed in accordance with Methods 1 thorough 4 and 10 of 40 CFR Part 60, Appendix A.

If required, the permittee shall demonstrate compliance with the hourly VOC emission limitation through emission tests performed in accordance with Methods 1 through 4 and 25 of 40 CFR Part 60, Appendix A.

Alternative US EPA-approved test methods may be used with prior approval from the Ohio EPA.

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

b. Emission Limitations:

0.27 TPY of PE, based upon a rolling, 12-month summation of the monthly emissions;

2.15 TPY of SO_2, based upon a rolling, 12-month summation of the monthly emissions;

13.77 TPY of NO_X, based upon a rolling, 12-month summation of the monthly emissions;

3.66 TPY of CO, based upon a rolling, 12-month summation of the monthly emissions; and

0.39 TPY of VOC, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Methods

Compliance with the annual emission limitations for the pollutants specified above are ensured if compliance is maintained with the restricted annual hours of operation (i.e. 499 hours per rolling, 12-month period). The annual emission limitations were calculated by multiplying the hourly emission limitations (for each pollutant respectively) by the restricted annual hours of operation, and dividing by 2000 pounds per ton.

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-31-05(D), 40 CFR Part 52.21, and OAC rule 3745-31-10 through OAC rule 3745-31-20)

c. Emission Limitation:

PE from each diesel generator shall not exceed 0.062 pound per MMBtu of actual heat content.

Applicable Compliance Method:

Compliance may be based upon an emission factor of 0.062 pound PE per MMBtu specified in AP-42, Fifth Edition, Chapter 3, Section 3.4, “Large Stationary Diesel Engines”, Table 3.4-2, 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

(Authority for term: OAC rules 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) and 3745-17-11(B)(5)(b))

d. Emissions Limitation:

SO_2 emissions from each emissions unit shall not exceed 0.5 pound per MMBtu of actual heat input.

Applicable Compliance Method:

Compliance with the SO_2 emission limitation shall be demonstrated by the recordkeeping requirements specified in d)(3).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A.

Sulfur dioxide emissions from liquid fuel samples shall be calculated as follows:

$ER = [(1 \times 10^{6}) / H] \times D \times S \times 1.974$

where:

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

H = the heat content of the liquid fuel in Btu per gallon;

D = the density of the liquid fuel in pounds per gallon; and

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

(Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3), OAC rule 3745-18-04(E) and OAC rule 3745-18-04(F)(2))

e. Emission Limitation:

Visible particulate emissions from the stack serving each emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

No visible emissions observations are specifically required to demonstrate compliance with this emission limitation but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A).

(Authority for term: OAC rule 3745-77-07(C)(1) OAC rule 3745-31-05(A)(3), and OAC rule 3745-17-03(B)(1)(a))

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as or more stringent than the testing requirements contained in Permit to Install #14-04682, issued on 8/24/2004: f)(1)a. through f)(1)e. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

g) Miscellaneous Requirements

(1) None.