



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

08/30/04

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

14-09-12-0656
CINCINNATI GAS & ELECTRIC CO., WOODSDALE
STATION
John F Funke
Cincinnati Gas & Electric Company
P. O. Box 960, Room 552-Annex
Cincinnati, OH 45201

Dear John F Funke:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

If you have any questions, please contact Hamilton County Dept. of Environmental Services.

Sincerely,

Michael W. Ahern
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: Hamilton County Dept. of Environmental Services
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 08/30/04	Effective Date: 09/20/04	Expiration Date: 09/20/09
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This document constitutes issuance of a Title V permit for Facility ID: 14-09-12-0656 to:
CINCINNATI GAS & ELECTRIC CO., WOODSDALE STATION
 2100 Woodsdale Road
 Trenton, OH 45067-0000

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

B001 (Combustion Turbine Unit 1) ABB model GT-11N combustion turbine.	B006 (Combustion Turbine Unit 6) ABB model GT-11N combustion turbine.	B016 (Vaporizing Boiler # 4) Cleaver Brooks model CB 700-500 propane vaporizing boiler
B002 (Combustion Turbine Unit 2) ABB model GT-11N combustion turbine.	B013 (Vaporizing Boiler # 1) Cleaver Brooks model CB 700-500 propane vaporizing boiler	B017 (Vaporizing Boiler # 5) Cleaver Brooks model CB 700-500 propane vaporizing boiler
B003 (Combustion Turbine Unit 3) ABB model GT-11N combustion turbine.	B014 (Vaporizing Boiler # 2) Cleaver Brooks model CB 700-500 propane vaporizing boiler	B018 (Vaporizing Boiler # 6) Cleaver Brooks model CB 700-500 propane vaporizing boiler
B004 (Combustion Turbine Unit 4) ABB model GT-11N combustion turbine.	B015 (Vaporizing Boiler # 3) Cleaver Brooks model CB 700-500 propane vaporizing boiler	
B005 (Combustion Turbine Unit 5) ABB model GT-11N combustion turbine.		

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. 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. 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, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

1. **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 A.III of Part III of this Title V permit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

- i. The date, place (as defined in the permit), and time of sampling or measurements.
- ii. The date(s) analyses were performed.
- iii. The company or entity that performed the analyses.
- iv. The analytical techniques or methods used.
- v. The results of such analyses.
- vi. The operating conditions existing at the time of sampling or measurement.
(*Authority for term: OAC rule 3745-77-07(A)(3)(b)(i)*)

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(*Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii)*)

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

- i. **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 General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

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

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

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

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

- ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted 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 reports shall satisfy the requirements (in part) 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. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

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 overrides the reporting requirements specified in this General 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 the requirements (in part) 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 General Term and Condition.

See B.6 below if no deviations occurred during the quarter.

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

- iii. **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 General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be

submitted to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months.

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 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 General Term and Condition A.1.c.ii 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))

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))
- v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

2. **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 General Term and Condition A.1.c.i above.

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

3. **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))

4. **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))

5. 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))

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 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.

(Authority for term: OAC rule 3745-77-07(A)(7))

7. 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))

8. 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))

9. 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 general terms and conditions shall apply to all operating scenarios authorized in this permit.

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

10. 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))

11. 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))

12. 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:
 - i. 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.
 - ii. 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.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
 - i. 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.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. 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))

13. 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))

14. Operational Flexibility

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

air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. 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))

16. 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. 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))

17. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

18. Insignificant Activities

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

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

19. 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))*

20. 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))*

21. 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 by the responsible official of the date on which the emissions unit was permanently shut down. Authorization to operate the affected part or activity of the stationary source shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

If 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 monitoring, record keeping, reporting, or testing requirements, applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

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

B. State Only Enforceable Section

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

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

2. Records Retention Requirements

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.

3. 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.

4. Scheduled Maintenance/Malfunction Reporting

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

5. Permit Transfers

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

6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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 General Term and Condition A.1.c.ii;
- b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; and
- c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
2. 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 and OAC Chapter 3745-20.
3. The permittee shall comply with all applicable provisions specified in 40 CFR Part 82, Subparts B and F as related to the operations at this facility.
4. Nitrogen Oxides (NOx) Budget Trading Program

OAC Chapter 3745-14

4.a Office of Regulatory Information System Facility Code - 7158

4.b The following regulated electrical generating units are subject to the applicable requirements specified in OAC Chapter 3745-14 and the annual NOx allowance allocations listed below:

Emissions Unit	Annual Allowance for Calendar Years 2004 and 2005	Annual Allowance for Calendar Years 2006 and 2007
B001 - GT1	30	29
B002 - GT2	30	29
B003 - GT3	39	38
B004 - GT4	37	36
B005 - GT5	40	39
B006 - GT6	39	38

- 4.c** The emissions units identified in Section A.4.b above are NOx budget units under OAC rule 3745-14-01(C)(1). [OAC rule 3745-14-01(C)(1)(a)(i)]
- 4.d** The NOx authorized account representative shall submit a complete NOx budget permit application in accordance with the deadlines specified in paragraphs (B)(2) and (B)(3) of OAC rule 3745-14-03. The NOx authorized account representative shall also submit, in a timely manner, any supplemental information that the Director determines is necessary in order to review a NOx budget permit application and issue or deny a NOx budget permit. [OAC rules 3745-14-01(E)(1)(a)(i), 3745-14-01(E)(1)(a)(ii), and 3745-14-03(B)(1)]
- 4.e** Beginning May 31, 2004, the owners and operators of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under paragraph (E) of OAC rule 3745-14-06, as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with OAC rule 3745-14-08, plus any amount necessary to account for actual utilization under paragraph (C)(5) of OAC rule 3745-14-05 for the control period. [OAC rules 3745-14-01(E)(3)(a) and 3745-14-01(E)(3)(c)]
- 4.f** NOx allowances shall be held in, deducted from, or transferred among NOx allowance tracking system accounts in accordance with OAC rules 3745-14-05, 3745-14-06, 3745-14-07, and 3745-14-09. [OAC rule 3745-14-01(E)(3)(d)]
- 4.g** A NOx allowance shall not be deducted, in order to comply with the requirement under paragraph (E)(3)(a) of OAC rule 3745-14-01, for a control period in a year prior to the year for which the NOx allowance was allocated. [OAC rule 3745-14-01(E)(3)(e)]

A. State and Federally Enforceable Section (continued)

- 4.h** Each ton of NO_x emitted in excess of the NO_x budget emission limitation, as defined in OAC rule 3745-14-01(B)(2)(yy), shall constitute a separate violation of OAC Chapter 3745-14, the Clean Air Act, and applicable Ohio law. The owners and operators of a NO_x budget unit that has excess emissions in any control period shall surrender the NO_x allowances required for deduction under paragraph (E)(4)(a) of OAC rule 3745-14-06 and pay any fine, penalty, or assessment or comply with any other remedy imposed under paragraph (E)(4)(c) of OAC rule 3745-14-06.
[OAC rules 3745-14-01(E)(3)(b), 3745-14-01(E)(4)(a) and 3745-14-01(E)(4)(b)]
- 4.i** When recorded by the Administrator pursuant to OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NO_x budget permit of the NO_x budget unit by operation of law without any further review.
[OAC rule 3745-14-01(E)(3)(h)]
- 4.j** Except as provided below, the Director shall revise the NO_x budget permit, as necessary, in accordance with OAC rule 3745-77-08.

Each NO_x budget permit is deemed to incorporate automatically the definitions of terms under paragraph (B) of OAC rule 3745-14-01 and, when recorded by the Administrator, in accordance with OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NO_x allowance to or from the compliance accounts of the NO_x budget units covered by the permit or the overdraft account of the NO_x budget source covered by the permit.

[OAC rules 3745-14-03(D)(2) and 3745-14-03(E)(1)]

- 4.k** The owner or operator of a NO_x budget unit shall comply with the prohibitions under OAC rule 3745-14-08(A)(5).
[OAC rule 3745-14-08(A)(5)]
- 4.l** The owners and operators of the NO_x budget unit shall keep on site at the source each of the following documents for a period of five years from the date the document is created: (This period may be extended for cause, at any time prior to the end of five years, in writing by the Director or Administrator.)
- i. the account certificate of representation for the NO_x authorized account representative for the NO_x budget unit and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (D) of OAC rule 3745-14-02, provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate or representation changing the NO_x authorized account representative;
 - ii. all emission monitoring information, in accordance with OAC rule 3745-14-08;
 - iii. copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x budget trading program; and
 - iv. copies of all documents used to complete a NO_x budget permit application and any other submission under the NO_x budget trading program or to demonstrate compliance with the requirements of the NO_x budget trading program.
[OAC rule 3745-14-01(E)(5)(a)(i) through (iv)]

A. State and Federally Enforceable Section (continued)

- 4.m** The permittee shall operate and maintain equipment to continuously estimate and record nitrogen oxides emissions from these emissions units in units of the applicable standard(s). Such continuous estimating and recording equipment shall comply with the requirements specified in 40 CFR Part 75, Appendix E.

The permittee shall comply with the initial and re-certification procedures of 40 CFR Part 75.

The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides estimating system: emissions of nitrogen oxides in lb/mmBtu actual heat input on an hourly average basis and emissions of nitrogen oxides in lbs/hr.

Whenever the monitoring system fails to meet the quality assurance or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.

[OAC rules 3745-14-01(E)(2)(a), 3745-14-01(E)(5)(a)(ii), 3745-14-08(A)(2)(a) through (A)(2)(d), 3745-14-08(B)(1), and 3745-14-08(C)(1)]

- 4.n** The permittee shall comply with the monitoring plan requirements of 40 CFR Part 75.62, except that the monitoring plan shall also include all of the information required by Subpart H of 40 CFR Part 75.
[OAC rule 3745-14-08(E)(2)(a)]
- 4.o** The NOx authorized account representative of the NOx budget unit shall submit the reports and compliance certifications required under the NOx budget trading program, including those under OAC rules 3745-14-04 and 3745-14-08, to the Director and Administrator.
[OAC rule 3745-14-01(E)(5)(b)]
- 4.p** Each submission under the NOx budget trading program shall be submitted, signed, and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NOx authorized account representative:

"I am authorized to make this submission on behalf of the owners and operators of the NOx budget sources or NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

If the NOx authorized account representative for a NOx budget unit subject to an acid rain emission limitation who signed and certified any submission that is made under Subpart F or G of 40 CFR Part 75 and which includes data and information required under OAC rule 3745-14-08 or Subpart H of 40 CFR Part 75 is not the same person as the designated representative or the alternate designated representative for the unit under 40 CFR Part 72, then the submission shall also be signed by the designated representative or the alternate designated representative.

[OAC rules 3745-14-02(A)(5) and 3745-14-08(E)(1)(b)]

- 4.q** The NOx authorized account representative shall submit quarterly reports that include all of the data and information required in Subpart H of 40 CFR Part 75 for each NOx budget unit (or group of units using a common stack) and the data and information in Subpart G of 40 CFR Part 75. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30 and October 30 of each year and shall be submitted in the manner specified in Subpart H of 40 CFR Part 75 and 40 CFR Part 75.64.
[OAC rules 3745-14-08(E)(4)(a) and 3745-14-08(E)(4)(c)(i)]

A. State and Federally Enforceable Section (continued)

4.r The NO_x authorized account representative shall submit to the Administrator a compliance certification in support of each quarterly report based on a reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The compliance certification shall state that:

i. the monitoring data submitted were recorded in accordance with the applicable requirements of OAC rule 3745-14-08 and 40 CFR Part 75, including the quality assurance procedures and specifications; and

ii. for a unit with add-on NO_x emission controls and for all hours where data are substituted in accordance with 40 CFR Part 75.34(a)(1), the add-on emission control were operating within the range of parameters listed in the quality assurance program under Appendix B of 40 CFR Part 75 and the substitute values do not systematically underestimate the NO_x emissions.
[OAC rule 3745-14-08(E)(4)(d)(i) and (ii)]

4.s The NO_x authorized account representative for a NO_x budget unit shall submit written notice of monitoring system certification and re-certification test dates to the Director and the Administrator in accordance with 40 CFR Part 75.61. The NO_x authorized account representative shall submit a certification application to the Administrator, U.S. EPA, Region V Office, and the Director within forty-five days after completing all initial or re-certification tests required under paragraph (B) of OAC rule 3745-14-08, including the information required under Subpart H of 40 CFR Part 75.
[OAC rules 3745-14-08(D) and 3745-14-08(E)(3)]

4.t For each control period in which one or more NO_x budget units at a source are subject to the NO_x budget emission limitation, the NO_x authorized account representative of the source shall submit to the Director and the Administrator, by November 30 of that year, a compliance certification report for each source covering all such units.

The NO_x authorized account representative shall include the following elements in the compliance certification report, in a format prescribed by the Administrator, concerning each unit at the source and subject to the NO_x budget emission limitation for the control period covered by the report:

i. identification of each NO_x budget unit;

ii. at the NO_x authorized account representative's option, the serial numbers of the NO_x allowances that are to be deducted from each unit's compliance account under paragraph (E) of OAC rule 3745-14-06 for the control period;

iii. at the NO_x authorized account representative's option, for units sharing a common stack and having NO_x emissions that are not monitored separately or apportioned in accordance with OAC rule 3745-14-08, the percentage of allowances that is to be deducted from each unit's compliance account under paragraph (E)(5) of OAC rule 3745-14-06; and

iv. the compliance certification under paragraph (A)(3) of OAC rule 3745-14-04.
[OAC rules 3745-14-04(A)(1) and 3745-14-04(A)(2)]

A. State and Federally Enforceable Section (continued)

4.u In the compliance certification report under Section A.4.t.iv above, the NOx authorized account representative shall certify, based upon reasonable inquiry of those persons with the primary responsibility for operating the source and the NOx budget units at the source in compliance with the NOx budget trading program, whether each NOx budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NOx budget trading program applicable to the unit, including all the following:

- i. whether the unit was operated in compliance with the NOx budget emission limitation;
- ii. whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NOx emissions to the unit, in accordance with OAC rule 3745-14-08;
- iii. whether all the NOx emissions from the unit, or group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with OAC rule 3745-14-08, and if conditional data were reported, the permittee shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report submissions have been made; and
- iv. whether the facts that form the basis for certification under OAC rule 3745-14-08 of each monitor at the unit or group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under OAC rule 3745-14-08, if any, have changed.

If a change is required to be reported under Section A.4.u.iv above, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.

[OAC rule 3745-14-04(A)(3)]

4.v The NOx authorized account representative shall submit a complete NOx budget permit renewal application for the NOx budget source covering the NOx budget units at the source in accordance with paragraph (E) of OAC rule 3745-77-08.

[OAC rule 3745-14-03(B)(3)(a)]

4.w The emission measurements recorded and reported in accordance with OAC rule 3745-14-08 shall be used to determine compliance by the unit with the NOx budget emission limitation under paragraph (E)(3) of OAC rule 3745-14-01.

[OAC rule 3745-14-01(E)(2)(b)]

4.x The permittee shall develop and maintain a written quality assurance/quality control plan for each continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on-site and available for inspection during regular office hours.

[OAC rules 3745-14-08(A)(2)(c) and 3745-14-08(A)(2)(d)]

5. The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart YYYY (NESHAP for Combustion Turbines), in accordance with 40 CFR Parts 63.6080 through 63.6175 (including the Table(s) and Appendix(ices) referenced in Subpart YYYY), which are included in the text of Attachment 1 hereto, and are hereby incorporated into this permit as if fully rewritten.

Ordinarily, these requirements would be incorporated into Part II of this Title V permit; however, incorporating Subpart YYYY into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and/or equations into STARS format.

The following emissions units in this permit are subject to the aforementioned requirements: emissions units B001 through B006.

A. State and Federally Enforceable Section (continued)

6. The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart DDDDD (NESHAP for Industrial/Commercial/Institutional Boilers and Process Heaters), in accordance with 40 CFR Parts 63.7480 through 63.7575 (including the Table(s) and Appendix(ices) referenced in Subpart DDDDD), which are included in the text of Attachment 2 hereto, and are hereby incorporated into this permit as if fully rewritten.

Ordinarily, these requirements would be incorporated into Part II of this Title V permit; however, incorporating Subpart DDDDD into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and/or equations into STARS format.

The following emissions units in this permit are subject to the aforementioned requirements: emissions units B013 through B018.

7. The following insignificant emissions units are located at this facility:

B025 - combustion turbine black start unit (Permit to Install 14-1984);
B026 - diesel fire pump (Permit to Install 14-2179);
G001 - gasoline dispensing operation (Permit to Install 14-2520);
L001 - non-halogenated solvent cold parts cleaner (Permit to Install 14-2954); and
Z006 - 275,000 Btu/hr propane-fired generator.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chapter 3745-17.

B. State Only Enforceable Section

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Combustion Turbine Unit 1 (B001)
Activity Description: ABB model GT-11N combustion turbine.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
	40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitations:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
- iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

2.b Nitrogen Oxides (NOx) Emission Limitations:

- i. NOx emissions shall not exceed 261.4 lbs/hr.
- ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.

Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.

2.c Sulfur Dioxide (SO2) Emission Limitations:

- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
- iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.

2. Additional Terms and Conditions (continued)

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 6.97 lbs/hr.
- ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.

2.e Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 25.34 lbs/hr.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design.

2.f The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:

For any 3-hour period:

$$\text{gallons of fuel oil} = 35078 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

For any 24-hour period:

$$\text{gallons of fuel oil} = 158228 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.

Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). 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.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.I. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

Nitrogen Content:

To compute the NO_x emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
 - a. The total hours of operation for this emissions unit.
 - b. The total combined hours of operation for emissions units B001 through B006.
 - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee shall collect and record the following information:
 - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - e. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - f. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - g. Identification of each cold start-up for this emissions unit.
 - h. Identification of each shutdown for this emissions unit.

IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

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

IV. Reporting Requirements (continued)

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. 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.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
 - b. Any exceedance of the 3-hour and/or 24-hour SO₂ emission limitations when burning fuel oil for emissions units B001 through B006.
 - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
 - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
 - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
Emissions of PE/PM₁₀ shall not exceed 40.4 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM₁₀ emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM₁₀ per second when burning fuel oil, and 0.24 gram of PE/PM₁₀ per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the PE and PM₁₀ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.

Applicable Compliance Method:

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

V. Testing Requirements (continued)

3. Emission Limitations:
NOx emissions shall not exceed 261.4 lbs/hr.

When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.

When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.

Applicable Compliance Method:

The hourly NOx emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NOx per second when burning fuel oil, and 32.50 grams of NOx per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Compliance with the NOx concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.

If required, the permittee shall demonstrate compliance with the NOx concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).

4. Emission Limitations:
When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.

When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.

When burning natural gas or LPG, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.

Applicable Compliance Method:

The hourly SO2 emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO2 emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO2 per second when burning fuel oil, and 0.00 gram of SO2 per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

If required, the permittee shall demonstrate compliance with the SO2 concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).

Compliance with the total combined 3-hour and 24-hour SO2 emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.

V. Testing Requirements (continued)

5. Emission Limitation:
CO emissions shall not exceed 25.34 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.

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 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

6. Emission Limitation:
VOC emissions shall not exceed 6.97 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.

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 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM10, NO_x, SO₂, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM10, NO_x, SO₂, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM10 - 40 CFR Part 60, Appendix A, Methods 1 through 5;
for NO_x (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;
for NO_x (concentration) - 40 CFR Part 60, Appendix A, Method 20
for SO₂ - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Testing for PE/PM10, NO_x, and SO₂ shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

Facility Name: **Cincinnati Gas & Electric Co., Woodsdale**

Facility ID: **14-09-12-0656**

Emissions Unit: **Combustion Turbine Unit 1 (B001)**

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Combustion Turbine Unit 2 (B002)
Activity Description: ABB model GT-11N combustion turbine.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
	40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitations:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
- iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

2.b Nitrogen Oxides (NOx) Emission Limitations:

- i. NOx emissions shall not exceed 261.4 lbs/hr.
- ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.

Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.

2.c Sulfur Dioxide (SO2) Emission Limitations:

- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
- iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.

2. Additional Terms and Conditions (continued)

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 6.97 lbs/hr.
- ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.

2.e Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 25.34 lbs/hr.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design.

2.f The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:

For any 3-hour period:

$$\text{gallons of fuel oil} = 35078 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

For any 24-hour period:

$$\text{gallons of fuel oil} = 158228 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.

Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). 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.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.I. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

Nitrogen Content:

To compute the NO_x emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
 - a. The total hours of operation for this emissions unit.
 - b. The total combined hours of operation for emissions units B001 through B006.
 - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee shall collect and record the following information:
 - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - e. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - f. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - g. Identification of each cold start-up for this emissions unit.
 - h. Identification of each shutdown for this emissions unit.

IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

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

IV. Reporting Requirements (continued)

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. 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.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
 - b. Any exceedance of the 3-hour and/or 24-hour SO₂ emission limitations when burning fuel oil for emissions units B001 through B006.
 - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
 - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
 - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
Emissions of PE/PM₁₀ shall not exceed 40.4 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM₁₀ emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM₁₀ per second when burning fuel oil, and 0.24 gram of PE/PM₁₀ per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the PE and PM₁₀ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.

Applicable Compliance Method:

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

V. Testing Requirements (continued)

3. Emission Limitations:
NOx emissions shall not exceed 261.4 lbs/hr.

When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.

When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.

Applicable Compliance Method:

The hourly NOx emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NOx per second when burning fuel oil, and 32.50 grams of NOx per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Compliance with the NOx concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.

If required, the permittee shall demonstrate compliance with the NOx concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).

4. Emission Limitations:
When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.

When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.

When burning natural gas or LPG, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.

Applicable Compliance Method:

The hourly SO2 emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO2 emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO2 per second when burning fuel oil, and 0.00 gram of SO2 per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

If required, the permittee shall demonstrate compliance with the SO2 concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).

Compliance with the total combined 3-hour and 24-hour SO2 emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.

V. Testing Requirements (continued)

5. Emission Limitation:
CO emissions shall not exceed 25.34 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.

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 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

6. Emission Limitation:
VOC emissions shall not exceed 6.97 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.

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 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM10, NO_x, SO₂, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM10, NO_x, SO₂, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM10 - 40 CFR Part 60, Appendix A, Methods 1 through 5;
for NO_x (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;
for NO_x (concentration) - 40 CFR Part 60, Appendix A, Method 20
for SO₂ - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Testing for PE/PM10, NO_x, and SO₂ shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Combustion Turbine Unit 3 (B003)
Activity Description: ABB model GT-11N combustion turbine.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
	40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitations:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
- iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

2.b Nitrogen Oxides (NOx) Emission Limitations:

- i. NOx emissions shall not exceed 261.4 lbs/hr.
- ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.

Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.

2.c Sulfur Dioxide (SO2) Emission Limitations:

- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
- iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.

2. Additional Terms and Conditions (continued)

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 6.97 lbs/hr.
- ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.

2.e Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 25.34 lbs/hr.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design.

2.f The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:

For any 3-hour period:

$$\text{gallons of fuel oil} = 35078 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

For any 24-hour period:

$$\text{gallons of fuel oil} = 158228 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.

Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). 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.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.I. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

Nitrogen Content:

To compute the NO_x emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
 - a. The total hours of operation for this emissions unit.
 - b. The total combined hours of operation for emissions units B001 through B006.
 - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee shall collect and record the following information:
 - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - e. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - f. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - g. Identification of each cold start-up for this emissions unit.
 - h. Identification of each shutdown for this emissions unit.

IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

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

IV. Reporting Requirements (continued)

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. 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.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
 - b. Any exceedance of the 3-hour and/or 24-hour SO₂ emission limitations when burning fuel oil for emissions units B001 through B006.
 - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
 - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
 - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
Emissions of PE/PM₁₀ shall not exceed 40.4 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM₁₀ emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM₁₀ per second when burning fuel oil, and 0.24 gram of PE/PM₁₀ per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the PE and PM₁₀ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.

Applicable Compliance Method:

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

V. Testing Requirements (continued)

3. Emission Limitations:
NOx emissions shall not exceed 261.4 lbs/hr.

When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.

When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.

Applicable Compliance Method:

The hourly NOx emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NOx per second when burning fuel oil, and 32.50 grams of NOx per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Compliance with the NOx concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.

If required, the permittee shall demonstrate compliance with the NOx concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).

4. Emission Limitations:
When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.

When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.

When burning natural gas or LPG, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.

Applicable Compliance Method:

The hourly SO2 emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO2 emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO2 per second when burning fuel oil, and 0.00 gram of SO2 per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

If required, the permittee shall demonstrate compliance with the SO2 concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).

Compliance with the total combined 3-hour and 24-hour SO2 emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.

V. Testing Requirements (continued)

5. Emission Limitation:
CO emissions shall not exceed 25.34 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.

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 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

6. Emission Limitation:
VOC emissions shall not exceed 6.97 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.

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 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM10 - 40 CFR Part 60, Appendix A, Methods 1 through 5;
for NOx (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;
for NOx (concentration) - 40 CFR Part 60, Appendix A, Method 20
for SO2 - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Testing for PE/PM10, NOx, and SO2 shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Combustion Turbine Unit 4 (B004)
Activity Description: ABB model GT-11N combustion turbine.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
	40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitations:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
- iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

2.b Nitrogen Oxides (NOx) Emission Limitations:

- i. NOx emissions shall not exceed 261.4 lbs/hr.
- ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.

Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.

2.c Sulfur Dioxide (SO2) Emission Limitations:

- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
- iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.

2. Additional Terms and Conditions (continued)

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 6.97 lbs/hr.
- ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.

2.e Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 25.34 lbs/hr.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design.

2.f The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:

For any 3-hour period:

$$\text{gallons of fuel oil} = 35078 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

For any 24-hour period:

$$\text{gallons of fuel oil} = 158228 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.

Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). 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.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.I. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

Nitrogen Content:

To compute the NO_x emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
 - a. The total hours of operation for this emissions unit.
 - b. The total combined hours of operation for emissions units B001 through B006.
 - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee shall collect and record the following information:
 - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - e. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - f. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - g. Identification of each cold start-up for this emissions unit.
 - h. Identification of each shutdown for this emissions unit.

IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

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

IV. Reporting Requirements (continued)

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. 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.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
 - b. Any exceedance of the 3-hour and/or 24-hour SO₂ emission limitations when burning fuel oil for emissions units B001 through B006.
 - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
 - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
 - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
Emissions of PE/PM₁₀ shall not exceed 40.4 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM₁₀ emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM₁₀ per second when burning fuel oil, and 0.24 gram of PE/PM₁₀ per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the PE and PM₁₀ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.

Applicable Compliance Method:

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

V. Testing Requirements (continued)

3. Emission Limitations:
NOx emissions shall not exceed 261.4 lbs/hr.

When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.

When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.

Applicable Compliance Method:

The hourly NOx emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NOx per second when burning fuel oil, and 32.50 grams of NOx per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Compliance with the NOx concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.

If required, the permittee shall demonstrate compliance with the NOx concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).

4. Emission Limitations:
When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.

When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.

When burning natural gas or LPG, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.

Applicable Compliance Method:

The hourly SO2 emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO2 emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO2 per second when burning fuel oil, and 0.00 gram of SO2 per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

If required, the permittee shall demonstrate compliance with the SO2 concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).

Compliance with the total combined 3-hour and 24-hour SO2 emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.

V. Testing Requirements (continued)

5. Emission Limitation:
CO emissions shall not exceed 25.34 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.

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 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

6. Emission Limitation:
VOC emissions shall not exceed 6.97 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.

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 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM10 - 40 CFR Part 60, Appendix A, Methods 1 through 5;
for NOx (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;
for NOx (concentration) - 40 CFR Part 60, Appendix A, Method 20
for SO2 - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Testing for PE/PM10, NOx, and SO2 shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Combustion Turbine Unit 5 (B005)
Activity Description: ABB model GT-11N combustion turbine.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
	40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitations:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
- iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

2.b Nitrogen Oxides (NOx) Emission Limitations:

- i. NOx emissions shall not exceed 261.4 lbs/hr.
- ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.

Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.

2.c Sulfur Dioxide (SO2) Emission Limitations:

- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
- iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.

2. Additional Terms and Conditions (continued)

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 6.97 lbs/hr.
- ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.

2.e Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 25.34 lbs/hr.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design.

2.f The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:

For any 3-hour period:

$$\text{gallons of fuel oil} = 35078 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

For any 24-hour period:

$$\text{gallons of fuel oil} = 158228 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.

Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). 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.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.I. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

Nitrogen Content:

To compute the NO_x emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
 - a. The total hours of operation for this emissions unit.
 - b. The total combined hours of operation for emissions units B001 through B006.
 - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee shall collect and record the following information:
 - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - e. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - f. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - g. Identification of each cold start-up for this emissions unit.
 - h. Identification of each shutdown for this emissions unit.

IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

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

IV. Reporting Requirements (continued)

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. 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.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
 - b. Any exceedance of the 3-hour and/or 24-hour SO₂ emission limitations when burning fuel oil for emissions units B001 through B006.
 - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
 - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
 - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
Emissions of PE/PM₁₀ shall not exceed 40.4 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM₁₀ emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM₁₀ per second when burning fuel oil, and 0.24 gram of PE/PM₁₀ per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the PE and PM₁₀ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.

Applicable Compliance Method:

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

V. Testing Requirements (continued)

3. Emission Limitations:
NOx emissions shall not exceed 261.4 lbs/hr.

When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.

When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.

Applicable Compliance Method:

The hourly NOx emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NOx per second when burning fuel oil, and 32.50 grams of NOx per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Compliance with the NOx concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.

If required, the permittee shall demonstrate compliance with the NOx concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).

4. Emission Limitations:
When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.

When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.

When burning natural gas or LPG, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.

Applicable Compliance Method:

The hourly SO2 emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO2 emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO2 per second when burning fuel oil, and 0.00 gram of SO2 per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

If required, the permittee shall demonstrate compliance with the SO2 concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).

Compliance with the total combined 3-hour and 24-hour SO2 emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.

V. Testing Requirements (continued)

5. Emission Limitation:
CO emissions shall not exceed 25.34 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.

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 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

6. Emission Limitation:
VOC emissions shall not exceed 6.97 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.

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 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM10 - 40 CFR Part 60, Appendix A, Methods 1 through 5;
for NOx (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;
for NOx (concentration) - 40 CFR Part 60, Appendix A, Method 20
for SO2 - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Testing for PE/PM10, NOx, and SO2 shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Combustion Turbine Unit 6 (B006)
Activity Description: ABB model GT-11N combustion turbine.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
	40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitations:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
- iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

2.b Nitrogen Oxides (NOx) Emission Limitations:

- i. NOx emissions shall not exceed 261.4 lbs/hr.
- ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.

Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.

2.c Sulfur Dioxide (SO2) Emission Limitations:

- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
- iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.

2. Additional Terms and Conditions (continued)

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 6.97 lbs/hr.
- ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.

2.e Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 25.34 lbs/hr.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design.

2.f The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:

For any 3-hour period:

$$\text{gallons of fuel oil} = 35078 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

For any 24-hour period:

$$\text{gallons of fuel oil} = 158228 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.

Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). 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.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.I. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

Nitrogen Content:

To compute the NO_x emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
 - a. The total hours of operation for this emissions unit.
 - b. The total combined hours of operation for emissions units B001 through B006.
 - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).

III. Monitoring and/or Record Keeping Requirements (continued)

5. The permittee shall collect and record the following information:
 - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
 - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
 - e. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - f. The total combined SO₂ emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO₂ emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
 - g. Identification of each cold start-up for this emissions unit.
 - h. Identification of each shutdown for this emissions unit.

IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO_x emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

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

IV. Reporting Requirements (continued)

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. 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.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
 - b. Any exceedance of the 3-hour and/or 24-hour SO₂ emission limitations when burning fuel oil for emissions units B001 through B006.
 - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
 - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
 - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
Emissions of PE/PM₁₀ shall not exceed 40.4 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM₁₀ emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM₁₀ per second when burning fuel oil, and 0.24 gram of PE/PM₁₀ per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the PE and PM₁₀ emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.

Applicable Compliance Method:

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

V. Testing Requirements (continued)

3. Emission Limitations:
NOx emissions shall not exceed 261.4 lbs/hr.

When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.

When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.

Applicable Compliance Method:

The hourly NOx emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NOx per second when burning fuel oil, and 32.50 grams of NOx per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Compliance with the NOx concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.

If required, the permittee shall demonstrate compliance with the NOx concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).

4. Emission Limitations:
When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.

When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.

When burning natural gas or LPG, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.

Applicable Compliance Method:

The hourly SO2 emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO2 emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO2 per second when burning fuel oil, and 0.00 gram of SO2 per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

If required, the permittee shall demonstrate compliance with the SO2 concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).

Compliance with the total combined 3-hour and 24-hour SO2 emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.

V. Testing Requirements (continued)

5. Emission Limitation:
CO emissions shall not exceed 25.34 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.

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 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

6. Emission Limitation:
VOC emissions shall not exceed 6.97 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.

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 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM10, NO_x, SO₂, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM10, NO_x, SO₂, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM10 - 40 CFR Part 60, Appendix A, Methods 1 through 5;
for NO_x (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;
for NO_x (concentration) - 40 CFR Part 60, Appendix A, Method 20
for SO₂ - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Testing for PE/PM10, NO_x, and SO₂ shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vaporizing Boiler # 1 (B013)

Activity Description: Cleaver Brooks model CB 700-500 propane vaporizing boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitation:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
- ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2. Additional Terms and Conditions (continued)

2.b Nitrogen Oxides (NO_x) Emission Limitation:

- i. NO_x emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
- ii. BACT for the NO_x emissions from this emissions unit was determined to be a low NO_x burner design.

2.c Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
- ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.e Sulfur Dioxide (SO₂) Emissions:

- i. BACT for the SO₂ emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- ii. SO₂ emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.

2.f The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:
 - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
 - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each day when a fuel other than LPG was burned in this emissions unit; and
 - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.

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. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.

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 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

V. Testing Requirements (continued)

3. Emission Limitation:
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.

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 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

4. Emission Limitation:
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.

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 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

5. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vaporizing Boiler # 2 (B014)

Activity Description: Cleaver Brooks model CB 700-500 propane vaporizing boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitation:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
- ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2. Additional Terms and Conditions (continued)

2.b Nitrogen Oxides (NO_x) Emission Limitation:

- i. NO_x emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
- ii. BACT for the NO_x emissions from this emissions unit was determined to be a low NO_x burner design.

2.c Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
- ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.e Sulfur Dioxide (SO₂) Emissions:

- i. BACT for the SO₂ emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- ii. SO₂ emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.

2.f The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:
 - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
 - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each day when a fuel other than LPG was burned in this emissions unit; and
 - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.

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. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.

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 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

V. Testing Requirements (continued)

3. Emission Limitation:
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.

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 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

4. Emission Limitation:
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.

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 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

5. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vaporizing Boiler # 3 (B015)

Activity Description: Cleaver Brooks model CB 700-500 propane vaporizing boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitation:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
- ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2. Additional Terms and Conditions (continued)

2.b Nitrogen Oxides (NO_x) Emission Limitation:

- i. NO_x emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
- ii. BACT for the NO_x emissions from this emissions unit was determined to be a low NO_x burner design.

2.c Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
- ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.e Sulfur Dioxide (SO₂) Emissions:

- i. BACT for the SO₂ emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- ii. SO₂ emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.

2.f The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:
 - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
 - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each day when a fuel other than LPG was burned in this emissions unit; and
 - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.

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. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.

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 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

V. Testing Requirements (continued)

3. Emission Limitation:
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.

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 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

4. Emission Limitation:
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.

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 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

5. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vaporizing Boiler # 4 (B016)

Activity Description: Cleaver Brooks model CB 700-500 propane vaporizing boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitation:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
- ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2. Additional Terms and Conditions (continued)

2.b Nitrogen Oxides (NO_x) Emission Limitation:

- i. NO_x emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
- ii. BACT for the NO_x emissions from this emissions unit was determined to be a low NO_x burner design.

2.c Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
- ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.e Sulfur Dioxide (SO₂) Emissions:

- i. BACT for the SO₂ emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- ii. SO₂ emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.

2.f The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:
 - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
 - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each day when a fuel other than LPG was burned in this emissions unit; and
 - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.

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. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.

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 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

V. Testing Requirements (continued)

3. Emission Limitation:
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.

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 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

4. Emission Limitation:
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.

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 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

5. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vaporizing Boiler # 5 (B017)

Activity Description: Cleaver Brooks model CB 700-500 propane vaporizing boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitation:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
- ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2. Additional Terms and Conditions (continued)

2.b Nitrogen Oxides (NO_x) Emission Limitation:

- i. NO_x emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
- ii. BACT for the NO_x emissions from this emissions unit was determined to be a low NO_x burner design.

2.c Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
- ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.e Sulfur Dioxide (SO₂) Emissions:

- i. BACT for the SO₂ emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- ii. SO₂ emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.

2.f The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:
 - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
 - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each day when a fuel other than LPG was burned in this emissions unit; and
 - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.

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. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.

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 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

V. Testing Requirements (continued)

3. Emission Limitation:
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.

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 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

4. Emission Limitation:
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.

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 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

5. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vaporizing Boiler # 6 (B018)

Activity Description: Cleaver Brooks model CB 700-500 propane vaporizing boiler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a Particulate Emission Limitation:

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
- ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2. Additional Terms and Conditions (continued)

2.b Nitrogen Oxides (NO_x) Emission Limitation:

- i. NO_x emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
- ii. BACT for the NO_x emissions from this emissions unit was determined to be a low NO_x burner design.

2.c Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.d Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
- ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

2.e Sulfur Dioxide (SO₂) Emissions:

- i. BACT for the SO₂ emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- ii. SO₂ emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.

2.f The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

II. Operational Restrictions

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:
 - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
 - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. each day when a fuel other than LPG was burned in this emissions unit; and
 - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

V. Testing Requirements

1. Emission Limitation:
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.

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. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.

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 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

V. Testing Requirements (continued)

3. Emission Limitation:
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.

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 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

4. Emission Limitation:
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.

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 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

5. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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