State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

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

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

07/16/07

RE: Proposed Title V Chapter 3745-77 Permit
16-67-04-0085
Kent State University Heating Plant

Attn: Stacey Coburn AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Coburn:

The proposed issuance of the Title V permit for Kent State University Heating Plant, has been created in Ohio EPA's State Air Resources System (STARS) on 07/16/07, for review by USEPA. This proposed action is identified in STARS as 3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact me at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,

Michael W. Ahern

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

cc: Akron Air Pollution Control
File, DAPC PIER

State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 07/16/07	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 16-67-04-0085 to:
Kent State University Heating Plant
P.O. Box 5190
Kent, OH 44242-0001

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

B006 (Nebraska Boiler No. 6) 121 MMBtu/Hr Natural Gas / Fuel Oil-fired boiler -Nebraska Model # N2S-7-95 B007 (Nebraska Boiler No. 7) 121 MMBtu/Hr Natural Gas / Fuel Oil-fired boiler - Nebraska Model # N2S-7-95	B008 (Solar Gas Turbine GT-1) 64.18 MMBtu/Hr Natural Gas / Fuel Oil-fired Combustion Turbine- Solar Model Taurus 60 B009 (Duct Burner) 76.02 MMBtu/Hr Natural Gas-fired Duct Burner-Coen	B010 (Solar Gas Turbine GT-2) 76.0 MMBtu/Hr Natural Gas-fired Combustion Turbine- Solar Model Taurus 70

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:

Akron Air Pollution Control
146 South High Street, Room 904
Akron, OH 44308
(330) 375-2480

Ohio Environmental Protection Agency

_____

Chris Korleski
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 (i.e., postmarked) 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. (An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).)

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

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply

reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

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 (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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

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

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; General Terms and Conditions: A.2, A.3, A.4, A.6.e, A.7, A.12, A.14, A.18, A.19, A.20, and A.22 of Part I of this Title V permit, as well as any deviations from the requirements in Section A.V or A.VI of Part III of this Title V permit**,** and any 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 (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable

requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in Part II.A of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with 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) and OAC rule 3745-77-07(A)(13)(b))

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.

f. Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable upon final issuance of all applicable OAC Chapter 3745-35 operating permits and/or registrations for all subject emissions units located at the facility and:

   i. the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a “major source” as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

   ii. the permittee no longer meets the definition of a “major source” as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

   iii. a combination of i. and ii. above.

   The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.
   (Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

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 (i.e., postmarked) 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, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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 or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

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 from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

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

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-01)

22. Title VI Provisions

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

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

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

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

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

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 (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

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 <u>Federally Enforceable</u> 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 (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii; or

b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or

c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

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

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

K001 CE & O Paint Shop Spray Booth (PTI 16-02340);
N003 Cunningham Incinerator;
T001 Fuel Oil Storage Tank No. 1 (PTI 16-01757);
T002 Fuel Oil Storage Tank No. 2 (PTI 16-01757);
T003 Fuel Oil Storage Tank No. 3 (PTI 16-01757);
T004 Fuel Oil Storage Tank No. 4 (PTI 16-01757);
T005 Fuel Oil Storage Tank No. 5; (PTI 16-01757); and
T006 Fuel Oil Storage Tank No. 6; (PTI 16-01757).

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 Chapters 3745-17, 3745-18, and 3745-21.

B. State Only Enforceable Section

1. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements (as defined in OAC rule 3745-77-01(H)) or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

Z001 Art Building Spray Booth;
Z002 Ceramics Lab Spray Booth;
Z003 Ceramics Lab Raku Kiln;
Z004 Ceramics Lab Salt Kiln;
Z005 Ceramics Lab Denver Kiln;
Z006 M Schwartz Cntr Spray Booth;
Z007 M Schwartz Cntr Glass Furnace F1;
Z008 M Schwartz Cntr Glass Furnace F2;
Z010 M Schwartz Cntr Reheat Chamnber G1;
Z011 M Schwartz Cntr Reheat Chamnber G2;
Z012 Taylor Hall Spray Booth;
Z013 Residence Hall Painting Operations;
Z014 CE&O Structure Painting Operations;
Z015 Ceramics Lab Silverado Kiln;
Z016 Ceramics Lab Six-Rad Kiln;
Z017 Ceramics Lab Slim Kiln;
Z018 Traffic Paint;
Z020 Franklin Hall Fume Hood;
Z021 White Hall Fume Hood;
Z022 Art Building Fume Hood;
Z023 Cunningham Hall Fume Hoods;
Z024 Kent Hall Fume Hood;
Z025 LCM Fume Hoods;
Z026 Lowry Hall Fume Hoods;
Z027 MACC Annex Fume Hood;
Z028 McGilvrey Hall Fume Hoods;
Z029 Williams Hall Research Lab Fume Hoods;
Z030 Michael Schwartz Center Fume Hood;
Z031 Music & Speech Radio Emergency Generator;
Z032 Science Research Lab Fume Hoods;
Z033 Smith Hall Fume Hoods;
Z034 Allerton Ph 1 Boilers;
Z035 Williams Hall Academic Fume Hoods;
Z036 Ice Arena Emergency Generator;
Z037 DeWeese Health Center Emergency Generator;
Z038 Beal Hall Emergency Generator;
Z039 Korb Hall Emergency Generator;
Z040 Business Administration Bldg Emergency Generator;
Z041 Music & Speech Emergency Generator;
Z042 Tri-Towers Emergency Generator;
Z043 Art Bldg Emergency Generator;

B. State Only Enforceable Section (continued)

Z044 Williams Hall Emergency Generator;
Z045 Math Bldg Emergency Generator;
Z046 Cunningham Hall Emergency Generator;
Z047 Memorial Gym Emergency Generator;
Z048 Merrill Hall Emergency Generator;
Z049 Smith Bldg Emergency Generator;
Z050 Student Center Emergency Generator;
Z051 Science Research lab Emergency Generator;
Z052 WKSU Radio Station Emergency Generator;
Z053 Stockdale Emergency Generator;
Z054 Portable Emergency Generator 350KW;
Z055 Portable Emergency Generator 225KW;
Z056 Portable Emergency Generator 70KW;
Z057 Vandeusen Hall Fume Hoods;
Z058 Ice Arena Boiler;
Z059 MACC Annex Emergency Generator;
Z060 Rockwell Hall Emergency Generator;
Z061 WKSU Tower Emergency Generator;
Z063 LCM Science Building Emergency Generator;
Z064 Moulton Hall Emergency Generator;
Z065 LCM Science Building Clean Room;
Z066 Allerton Ph 2 Boilers;
Z067 Small Group Boilers;
Z068 Student Recreation and Wellness Center Boiler;
Z069 Student Recreation and Wellness Center Boiler;
Z070 Library Emergency Generator;
Z071 Power Plant Emergency Generator;
Z072 Cunningham Annex Emergency Generator;
Z073 CE&O Diesel Tank;
Z074 CE&O Gasoline Tank;
Z075 CE&O Mixed Fuel Tank;
Z076 70kw Port. Genset Tank;
Z077 225kw Port. Genset Tank;
Z078 350kw Port. Genset Tank;
Z079 MACC Annex Genset Tank;
Z080 Beal Genset Tank;
Z081 Cunningham Annex Genset Tank;
Z082 LCM Genset Tank;
Z083 MACC Genset Tank;
Z084 Math Genset Tank;
Z085 Moulton Genset Tank;
Z086 Power Plant Genset Day-Tank;
Z087 Powerhouse Genset Tank;
Z088 Rockwell Genset Tank;
Z089 Science Research Genset Tank;
Z090 Tri-Towers Genset Tank;
Z091 Williams Genset Tank;
Z092 WKSU Genset Tank;
Z093 WKSU Tower Genset Tank;
Z094 Ceramics Lab Boiler;
Z095 Child Development Center Boilers;
Z096 DeWeese Boiler;
Z097 DeWeese Boiler;
Z098 Allerton Ph 1 Water Heaters;
Z099 Small Group Water Heaters;
Z100 DeWeese Water Heaters;
Z101 Ice Arena Water Heaters;

B. State Only Enforceable Section (continued)

Z102 Allerton Ph 2 Water Heaters;
Z103 Cunningham Annex Water Heaters;
Z104 Wellness CNTR Water Heaters;
Z105 WKSU Water Heater; and
Z106 Lake Olsen Emergency Generator.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Nebraska Boiler No. 6 (B006)

Activity Description: 121 MMBtu/Hr Natural Gas / Fuel Oil-fired boiler -Nebraska Model # N2S-7-95

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
121 million Btu/hr rated heat input natural gas/fuel oil-fired boiler	OAC rule 3745-31-05(A)(3) (PTI 16-02332)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average. 0.020 lb PE/mmBtu heat input 0.55 lb sulfur dioxide (SO2)/mmBtu heat input when burning gas: 0.16 lb nitrogen oxides (NOx)/mmBtu heat input 0.16 lb carbon monoxide (CO)/mmBtu heat input when burning oil: 0.20 lb NOx/mmBtu heat input 0.18 lb CO/mmBtu heat input The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C), and Part III, Section A.II below.
	40 CFR 60.42b 40 CFR 60.43b 40 CFR 60.44b OAC rule 3745-17-07(A) OAC rule 3745-17-10(B) OAC rule 3745-18-06(D)	The emission control requirements specified by these rules are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B) OAC rule 3745-21-07(B) OAC 3745-23-06(B)	See A.I.2.b below.
	40 CFR Part 75 OAC rule 3745-103	See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05(C)	The following annual emission limits, for B006 through B010 combined, are based upon a rolling, 12-month summation of the monthly emissions, and are restricted by the federally enforceable production limitations of Part III, Section A.II: 87.0 tons/year of CO; 99.0 tons/year of NOx; 9.5 tons/year of PE; and 99.0 tons/year of SO2.

2. Additional Terms and Conditions

2.a The mass emission limitations for PE, SO2, NOx, and CO established pursuant to OAC rule 3745-31-05(A)(3) are equal to or greater than the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to demonstrate compliance with these emission limitations.

However, if any proposed change(s), such as with fuel grade, quality, and/or heat content, heat input capacity, equipment changeover, etc., or any other change(s), increase(s) the potential to emit, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

2.b The permittee satisfies the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-21-07(B), respectively, by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

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.

2.c If the permittee is subject to the requirements of 40 CFR Part 72 and 75 concerning acid rain, the permittee shall ensure that any effected 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.

II. Operational Restrictions

1. The permittee shall burn only natural gas and/or No. 2 fuel oil as fuel in this emissions unit. The No. 2 fuel oil shall contain no more than 0.48%, by weight, of sulfur and shall meet the distillate oil and very low sulfur oil definitions of 40 CFR 60.41b.

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

2. If burned exclusively, with no usage of gas, the maximum annual oil usage for emissions units B006 through B008, combined, shall not exceed 2.627 million gallons based upon a rolling, 12-month summation of the monthly oil usage rates.

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

II. Operational Restrictions (continued)

3. If burned exclusively, with no usage of gas, the maximum annual oil usage for emissions unit B008 shall not exceed 0.740 million gallons based upon a rolling, 12-month summation of the monthly oil usage rates.

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

4. If burned exclusively, with no usage of oil, the maximum annual gas usage for emissions units B006 through B010, combined, shall not exceed 1414 million cubic feet based upon a rolling, 12-month summation of the monthly gas usage rates.

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

5. If oil is substituted for gas in emissions units B006 and/or B007, then the annual limit of 1414 million cubic feet of natural gas shall be reduced by 71.5 cubic feet for each gallon of oil burned.

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

6. If oil is substituted for gas in emissions unit B008, then the annual limit of 1414 million cubic feet of natural gas shall be reduced by 540 cubic feet for each gallon of oil burned.

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

7. Consequent to the results from initial performance testing conducted on June 12-13, 2001, and pursuant to OAC rule 3745-17-10(B)(3), the heat input for this emissions unit, when burning oil, is derated from 121 mmBtu/hr to 72.6 mmBtu/hr. Correspondingly, when burning oil, at no time shall the steam flow rate from this emissions unit exceed 60,000 lbs/hr (as an average over any one-hour period).

The steam flow rate output restriction of this emissions unit may be removed upon written approval from the Director (the appropriate Ohio EPA District Office or local air agency) and without need of formal permit modification or issuance of a new permit, provided the permittee retests this emissions unit and demonstrates compliance when burning oil at or near the maximum rated heat input of 121 mmBtu/hr and steam flow rate output of 100,000 lbs/hr, following the requirements of V.3 "Test Requirements" below.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain fuel receipts from the fuel supplier listing the ASTM D396-78 specifications (including fuel oil number and weight percent sulfur content), and certifying that the oil meets the definitions of distillate oil and very low sulfur oil of 40 CFR 60.41b.

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

2. The permittee shall maintain monthly records of the following information for emissions units B006 through B010, combined:

a. the monthly amount of oil burned (gallons);
b. the rolling, 12-month amount of oil burned (gallons);
c. the monthly amount of gas burned (cubic feet);
d. the rolling, 12-month amount of gas burned (cubic feet);
e. the monthly emissions (tons) for each of CO, NOx, PE, and SO2; and
f. the rolling, 12-month emission rates (tons) for each CO, NOx, PE, and SO2.

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

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

3. In accordance with 40 CFR Part 60.48b, for the combustion of oil, the permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of PE from this emissions unit discharged to the atmosphere, and record the output of the system in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Prior to the installation of the COMS, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1 for approval by the Ohio EPA, Central Office.

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

4. In accordance with 40 CFR Part 60.48b, the permittee shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system for measuring NOx emissions discharged to the atmosphere and record the output of the system in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Prior to the installation of the NOx CEM, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2 for approval by the Ohio EPA, Central Office.

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

5. Span values for NOx shall be determined in accordance with 40 CFR 60.48b(e).

6. When NOx emission data are not obtained because of CEM system breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

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

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

7. In accordance with 40 CFR 60.49b(g), the permittee shall maintain records of the following information for each steam generating unit operating day:

a. calendar date;

b. the average hourly NOx emission rates (lb/million Btu heat input) measured or predicted;

c. the 30-day average NOx emission rates (lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly NOx emission rates or the preceding 30 steam generating unit operating days;

d. identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emissions standards, with the reasons for such excess emissions as well as a description of corrective actions taken;

e. identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;

f. identification of times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;

g. identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

h. identification of the times when the pollutant concentration exceeded full span of the CEM system;

i. description of any modifications to the CEM system that could affect the ability of the system to comply with Performance Specification 2 or 3; and

j. results of daily CEM systems drift tests.

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

8. The permittee shall maintain daily records of the following information for this emissions unit:

a. The total summation of steam flow from this emissions unit, in pounds/day;

b. The total hours of steam flow from this emissions unit, in hours/day; and

c. The average hourly steam flow rate from this emissions unit, in pounds/hour, i.e., c = a/b.

Copies of all steam flow records for this emissions unit shall be maintained for a period of not less than 5 years, and shall be made available to the Director (appropriate Ohio EPA District Office or local air agency) upon verbal or written request.

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

IV. Reporting Requirements

1. The permittee shall submit quarterly reports certifying no fuel, except as specified above in Part III, A.II Operational Restrictions, was burned in this emissions unit during the preceding calendar quarter.

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

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel usage rates, each for oil and gas, as specified in Part III, A.II Operational Restrictions, as well as the corrective actions that were taken to achieve compliance.

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

IV. Reporting Requirements (continued)

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission rates, for CO, NOx, PE, and SO2, for emissions units B006 through B010, combined, as well as the corrective actions that were taken to achieve compliance.

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

4. The permittee shall submit notification of the date of initial startup, as provided by 40 CFR60.7. The notification shall include the design heat input capacity of the steam generating unit(s) and identification of the fuels to be combusted in the subject units.

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

5. The permittee shall submit to the Administrator the performance test data from the initial emissions test and the performance evaluation of the continuous monitoring systems using the applicable performance specifications in 40 CFR Part 60, Appendix B.

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

6. The permittee shall submit a quarterly report containing the information recorded under 40 CFR 60.49b(g).

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

7. If for any reason the steam flow rate from this emissions unit exceeded 60,000 lbs/hr, when burning oil, the following information shall be reported within 5 business days after the exceedance:

a. the date of the exceedance;

b. the time interval over which the exceedance occurred;

c. the value of the exceedance;

d. the cause(s) of the exceedance;

e. the corrective action which has been or will be taken to prevent similar exceedances in the future; and

f. a copy of the steam chart which shows the exceedance.

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

8. Unless specified otherwise, all above quarterly deviation reports shall be submitted in accordance with the deadlines and other requirements specified in Part I - General Term and Condition 2 of this permit.

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

V. Testing Requirements

1. Compliance with the emission limitations of OAC rule 3745-31-05(A)(3) in Part III, Section A.I.1 of these terms and conditions shall be demonstrated in accordance with the following methods, using applicable emission factors from US EPA reference document AP-42, Fifth Edition, Tables 1.3-1, 1.4-1, and 1.4-2, and heat contents of 137,000 Btu/gallon of oil & 1000 Btu/cubic foot of gas:

1.a Emission Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method: Compliance with the visible PE shall be demonstrated in accordance with Method 9 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1))

V. Testing Requirements (continued)

1.b Emission Limitation: 0.020 lb PE/mmBtu heat input

Applicable Compliance Method: The potential to emit is less than the above emission limitation, as demonstrated in the equations below:

when burning gas:

E = GP/H

where,

E = 0.0019 lb PE/mmBtu heat input [potential to emit];
G = 0.121 mm cu ft/hr [design fuel usage];
P = 1.9 lbs PE/mm cu ft [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

when burning oil:

E = OP/H

where,

E = 0.01 lb PE/mmBtu heat input [potential to emit];
O = 883 gals/hr [design fuel usage];
P = 2 lbs PE/1000 gals [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 5.

(Authority for term: OAC rule 3745-17-03(B)(9), OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

1.c Emission Limitation: 0.55 lb SO2/mmBtu heat input

Applicable Compliance Method: The potential to emit is equal to the above emission limitation, as demonstrated in the equation below:

when burning gas:
Compliance with this limitation will be assumed due to the negligible % sulfur content of natural gas.

when burning oil:

E = OS/H

where,

E = 0.55 lb SO2/mmBtu heat input [potential to emit];
O = 883 gals/hr [design fuel usage];
S = 75.36 lbs SO2/1000 gals [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 6.

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

V. Testing Requirements (continued)

1.d Emission Limitations: 0.16 lb NOx/mmBtu heat input (when burning gas); and
0.20 lb NOx/mmBtu heat input (when burning oil)

Applicable Compliance Method: The potential to emit is less than the above emission limitations, as demonstrated in the equations below:

when burning gas:

E = GN/H

where,

E = 0.14 lb NOx/mmBtu heat input [potential to emit];
G = 0.121 mm cu ft/hr [design fuel usage];
N = 140 lbs NOx/mm cu ft [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

when burning oil:

E = ON/H

where,

E = 0.073 lb NOx/mmBtu heat input [potential to emit];
O = 883 gals/hr [design fuel usage];
N = 10 lbs NOx/1000 gals [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 7E.

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

V. Testing Requirements (continued)

1.e Emission Limitation: 0.16 lb CO/mmBtu heat input (when burning gas); and
0.18 lb CO/mmBtu heat input (when burning oil)

Applicable Compliance Method: The potential to emit is less than the above emission limitations, as demonstrated in the equations below:

when burning gas:

E = GC/H

where,

E = 0.084 lb CO/mmBtu heat input [potential to emit];
G = 0.121 mm cu ft/hr [design fuel usage];
C = 84 lbs CO/mm cu ft [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

when burning oil:

E = OC/H

where,

E = 0.04 lb CO/mmBtu heat input [potential to emit];
O = 883 gals/hr [design fuel usage];
C = 5 lbs CO/1000 gals [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 10.

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

2. Compliance with the annual CO, NOx, PE, and SO2 emission limitations of OAC rule 3745-31-05 (C) in Part III, Section A.I.1 of these terms and conditions shall be demonstrated in accordance with the emissions determination, as required in the record keeping section of Part III, Section A.III.2 above, using the synthetic minor potential to emit strategy contained in the "Permit to Install Application Supporting Documentation" prepared 10/21/03 by David Marczely, Environmental Design Group, 450 Grant Street, Akron, Ohio 44311, included in the application.

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

V. Testing Requirements (continued)

3. The permittee shall conduct emission and continuous emission monitoring (CEM) equipment performance testing for this emissions unit in accordance with the following requirements:

a. The testing shall be conducted in the period 18 to 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for NOx, in the appropriate averaging period(s), and the CEM performance testing shall be conducted, as required under 40 CFR 60.46b, in accordance with 40 CFR 60.8, using the continuous system for monitoring nitrogen oxides under 40 CFR 60.48b.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

7E.

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

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency 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.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

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

4. The permittee shall conduct, or have conducted, performance testing of the COMS in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1 and ASTM D 6216-98, following the manufacturer's specified quality assurance procedures. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Copies of the test results shall be submitted to Ohio EPA Central Office and Akron Air Quality.

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

5. The permittee demonstrated compliance with the NOx and opacity emission standards of OAC rule 3745-31-05(A)(3) in Part III, Section A.I.1 at or near design capacity, while burning gas, and at 60% of design capacity, while burning oil, and successfully completed certification of the NOx CEM system, in accordance with 40 CFR 60.8, 40 CFR 60.46b, and 40 CFR 60, Appendix B, Performance Specifications 2 & 3, during the emissions and performance testing conducted on June 12-13, 2001. A final test report was received at this office on July 23, 2001.

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

V. Testing Requirements (continued)

6. The permittee shall have the option to remove the deration and corresponding steam flow rate output restriction of Part III, Section A.II.10 above by conducting emission testing of this emissions unit, when burning oil, in accordance with the following requirements:

a. The emission testing shall be conducted to demonstrate compliance with the visible particulate emissions limitation (% opacity) and the NOx mass emissions limitation (lbs NOx/mmBtu heat input), when burning oil.

b. The tests shall demonstrate compliance with the following allowable emission rates using the specified test methods:

20% opacity as a six-minute average, using Method 9 of 40 CFR Part 60, Appendix A; and

0.20 lb NOx/mmBtu heat input, using Method 7E of 40 CFR Part 60, Appendix A.

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

c. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

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

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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

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

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

VI. Miscellaneous Requirements (continued)

3. Within 180 days of the effective date of PTI 16-02332, if not already done so, the permittee shall develop a written quality assurance/quality control plan for the COMS designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks and a description of preventive maintenance activities. The quality assurance/quality control plan and a logbook dedicated to the COMS must be kept on site and available for inspection during regular office hours.

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

4. Within 180 days of the effective date of PTI 16-02332, if not already done so, the permittee shall develop a written quality assurance/quality control plan for the NOx CEMS designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks and a description of preventive maintenance activities. The quality assurance/quality control plan and a logbook dedicated to the NOx CEMS must be kept on site and available for inspection during regular office hours.

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
121 million Btu/hr rated heat input natural gas/fuel oil-fired boiler	None	None

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: Nebraska Boiler No. 7 (B007)

Activity Description: 121 MMBtu/Hr Natural Gas / Fuel Oil-fired boiler - Nebraska Model # N2S-7-95

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
121 million Btu/hr rated heat input natural gas/fuel oil-fired boiler	OAC rule 3745-31-05(A)(3) (PTI 16-02332)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average. 0.020 lb PE/mmBtu heat input 0.55 lb sulfur dioxide (SO2)/mmBtu heat input when burning gas: 0.16 lb nitrogen oxides (NOx)/mmBtu heat input 0.16 lb carbon monoxide (CO)/mmBtu heat input when burning oil: 0.20 lb NOx/mmBtu heat input 0.18 lb CO/mmBtu heat input The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C), and Part III, Section A.II below.
	40 CFR 60.42b 40 CFR 60.43b 40 CFR 60.44b OAC rule 3745-17-07(A) OAC rule 3745-17-10(B) OAC rule 3745-18-06(D)	The emission control requirements specified by these rules are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B) OAC rule 3745-21-07(B) OAC 3745-23-06(B)	See A.I.2.b below.
	40 CFR Part 75 OAC rule 3745-103	See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05(C)	The following annual emission limits, for B006 through B010 combined, are based upon a rolling, 12-month summation of the monthly emissions, and are restricted by the federally enforceable production limitations of Part III, Section A.II: 87.0 tons/year of CO; 99.0 tons/year of NOx; 9.5 tons/year of PE; and 99.0 tons/year of SO2.

2. Additional Terms and Conditions

2.a The mass emission limitations for PE, SO2, NOx, and CO established pursuant to OAC rule 3745-31-05(A)(3) are equal to or greater than the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to demonstrate compliance with these emission limitations.

However, if any proposed change(s), such as with fuel grade, quality, and/or heat content, heat input capacity, equipment changeover, etc., or any other change(s), increase(s) the potential to emit, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

2.b The permittee satisfies the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-21-07(B), respectively, by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

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.

2.c If the permittee is subject to the requirements of 40 CFR Part 72 and 75 concerning acid rain, the permittee shall ensure that any effected 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.

II. Operational Restrictions

1. The permittee shall burn only natural gas and/or No. 2 fuel oil as fuel in this emissions unit. The No. 2 fuel oil shall contain no more than 0.48%, by weight, of sulfur and shall meet the distillate oil and very low sulfur oil definitions of 40 CFR 60.41b.

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

2. If burned exclusively, with no usage of gas, the maximum annual oil usage for emissions units B006 through B008, combined, shall not exceed 2.627 million gallons based upon a rolling, 12-month summation of the monthly oil usage rates.

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

II. Operational Restrictions (continued)

3. If burned exclusively, with no usage of gas, the maximum annual oil usage for emissions unit B008 shall not exceed 0.740 million gallons based upon a rolling, 12-month summation of the monthly oil usage rates.

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

4. If burned exclusively, with no usage of oil, the maximum annual gas usage for emissions units B006 through B010, combined, shall not exceed 1414 million cubic feet based upon a rolling, 12-month summation of the monthly gas usage rates.

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

5. If oil is substituted for gas in emissions units B006 and/or B007, then the annual limit of 1414 million cubic feet of natural gas shall be reduced by 71.5 cubic feet for each gallon of oil burned.

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

6. If oil is substituted for gas in emissions unit B008, then the annual limit of 1414 million cubic feet of natural gas shall be reduced by 540 cubic feet for each gallon of oil burned.

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

7. Consequent to the results from emission compliance testing conducted on June 13, 2002, and pursuant to OAC rule 3745-17-10(B)(3), the heat input for this emissions unit, when burning oil, is derated from 121 mmBtu/hr to 84.7 mmBtu/hr. Correspondingly, when burning oil, at no time shall the steam flow rate from this emissions unit exceed 70,000 lbs/hr (as an average over any one-hour period).

The steam flow rate output restriction of this emissions unit may be removed upon written approval from the Director (the appropriate Ohio EPA District Office or local air agency) and without need of formal permit modification or issuance of a new permit, provided the permittee retests this emissions unit and demonstrates compliance when burning oil at or near the maximum rated heat input of 121 mmBtu/hr and steam flow rate output of 100,000 lbs/hr, following the requirements of V.3 "Test Requirements" below.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain fuel receipts from the fuel supplier listing the ASTM D396-78 specifications (including fuel oil number and weight percent sulfur content), and certifying that the oil meets the definitions of distillate oil and very low sulfur oil of 40 CFR 60.41b.

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

2. The permittee shall maintain monthly records of the following information for emissions units B006 through B010, combined:

a. the monthly amount of oil burned (gallons);
b. the rolling, 12-month amount of oil burned (gallons);
c. the monthly amount of gas burned (cubic feet);
d. the rolling, 12-month amount of gas burned (cubic feet);
e. the monthly emissions (tons) for each of CO, NOx, PE, and SO2; and
f. the rolling, 12-month emission rates (tons) for each CO, NOx, PE, and SO2.

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

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

3. In accordance with 40 CFR Part 60.48b, for the combustion of oil, the permittee shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of PE from this emissions unit discharged to the atmosphere, and record the output of the system in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Prior to the installation of the COMS, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 1 for approval by the Ohio EPA, Central Office.

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

4. In accordance with 40 CFR Part 60.48b, the permittee shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system for measuring NOx emissions discharged to the atmosphere and record the output of the system in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Prior to the installation of the NOx CEM, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2 for approval by the Ohio EPA, Central Office.

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

5. Span values for NOx shall be determined in accordance with 40 CFR 60.48b(e).

6. When NOx emission data are not obtained because of CEM system breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

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

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

7. In accordance with 40 CFR 60.49b(g), the permittee shall maintain records of the following information for each steam generating unit operating day:

a. calendar date;

b. the average hourly NOx emission rates (lb/million Btu heat input) measured or predicted;

c. the 30-day average NOx emission rates (lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly NOx emission rates or the preceding 30 steam generating unit operating days;

d. identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emissions standards, with the reasons for such excess emissions as well as a description of corrective actions taken;

e. identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;

f. identification of times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;

g. identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

h. identification of the times when the pollutant concentration exceeded full span of the CEM system;

i. description of any modifications to the CEM system that could affect the ability of the system to comply with Performance Specification 2 or 3; and

j. results of daily CEM systems drift tests.

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

8. The permittee shall maintain daily records of the following information for this emissions unit:

a. The total summation of steam flow from this emissions unit, in pounds/day;

b. The total hours of steam flow from this emissions unit, in hours/day; and

c. The average hourly steam flow rate from this emissions unit, in pounds/hour, i.e., c = a/b.

Copies of all steam flow records for this emissions unit shall be maintained for a period of not less than 5 years, and shall be made available to the Director (appropriate Ohio EPA District Office or local air agency) upon verbal or written request.

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

IV. Reporting Requirements

1. The permittee shall submit quarterly reports certifying no fuel, except as specified above in Part III, A.II Operational Restrictions, was burned in this emissions unit during the preceding calendar quarter.

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

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel usage rates, each for oil and gas, as specified in Part III, A.II Operational Restrictions, as well as the corrective actions that were taken to achieve compliance.

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

IV. Reporting Requirements (continued)

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission rates, for CO, NOx, PE, and SO2, for emissions units B006 through B010, combined, as well as the corrective actions that were taken to achieve compliance.

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

4. The permittee shall submit notification of the date of initial startup, as provided by 40 CFR60.7. The notification shall include the design heat input capacity of the steam generating unit(s) and identification of the fuels to be combusted in the subject units.

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

5. The permittee shall submit to the Administrator the performance test data from the initial emissions test and the performance evaluation of the continuous monitoring systems using the applicable performance specifications in 40 CFR Part 60, Appendix B.

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

6. The permittee shall submit a quarterly report containing the information recorded under 40 CFR 60.49b(g).

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

7. If for any reason the steam flow rate from this emissions unit exceeded 70,000 lbs/hr, when burning oil, the following information shall be reported within 5 business days after the exceedance:

a. the date of the exceedance;

b. the time interval over which the exceedance occurred;

c. the value of the exceedance;

d. the cause(s) of the exceedance;

e. the corrective action which has been or will be taken to prevent similar exceedances in the future; and

f. a copy of the steam chart which shows the exceedance.

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

8. Unless specified otherwise, all above quarterly deviation reports shall be submitted in accordance with the deadlines and other requirements specified in Part I - General Term and Condition 2 of this permit.

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

V. Testing Requirements

1. Compliance with the emission limitations of OAC rule 3745-31-05(A)(3) in Part III, Section A.I.1 of these terms and conditions shall be demonstrated in accordance with the following methods, using applicable emission factors from US EPA reference document AP-42, Fifth Edition, Tables 1.3-1, 1.4-1, and 1.4-2, and heat contents of 137,000 Btu/gallon of oil & 1000 Btu/cubic foot of gas:

1.a Emission Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method: Compliance with the visible PE shall be demonstrated in accordance with Method 9 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1))

V. Testing Requirements (continued)

1.b Emission Limitation: 0.020 lb PE/mmBtu heat input

Applicable Compliance Method: The potential to emit is less than the above emission limitation, as demonstrated in the equations below:

when burning gas:

E = GP/H

where,

E = 0.0019 lb PE/mmBtu heat input [potential to emit];
G = 0.121 mm cu ft/hr [design fuel usage];
P = 1.9 lbs PE/mm cu ft [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

when burning oil:

E = OP/H

where,

E = 0.01 lb PE/mmBtu heat input [potential to emit];
O = 883 gals/hr [design fuel usage];
P = 2 lbs PE/1000 gals [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 5.

(Authority for term: OAC rule 3745-17-03(B)(9), OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

1.c Emission Limitation: 0.55 lb SO2/mmBtu heat input

Applicable Compliance Method: The potential to emit is equal to the above emission limitation, as demonstrated in the equation below:

when burning gas:
Compliance with this limitation will be assumed due to the negligible % sulfur content of natural gas.

when burning oil:

E = OS/H

where,

E = 0.55 lb SO2/mmBtu heat input [potential to emit];
O = 883 gals/hr [design fuel usage];
S = 75.36 lbs SO2/1000 gals [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 6.

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

V. Testing Requirements (continued)

1.d Emission Limitations: 0.16 lb NOx/mmBtu heat input (when burning gas); and
0.20 lb NOx/mmBtu heat input (when burning oil)

Applicable Compliance Method: The potential to emit is less than the above emission limitations, as demonstrated in the equations below:

when burning gas:

E = GN/H

where,

E = 0.14 lb NOx/mmBtu heat input [potential to emit];
G = 0.121 mm cu ft/hr [design fuel usage];
N = 140 lbs NOx/mm cu ft [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

when burning oil:

E = ON/H

where,

E = 0.073 lb NOx/mmBtu heat input [potential to emit];
O = 883 gals/hr [design fuel usage];
N = 10 lbs NOx/1000 gals [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 7E.

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

V. Testing Requirements (continued)

1.e Emission Limitation: 0.16 lb CO/mmBtu heat input (when burning gas); and
0.18 lb CO/mmBtu heat input (when burning oil)

Applicable Compliance Method: The potential to emit is less than the above emission limitations, as demonstrated in the equations below:

when burning gas:

E = GC/H

where,

E = 0.084 lb CO/mmBtu heat input [potential to emit];
G = 0.121 mm cu ft/hr [design fuel usage];
C = 84 lbs CO/mm cu ft [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

when burning oil:

E = OC/H

where,

E = 0.04 lb CO/mmBtu heat input [potential to emit];
O = 883 gals/hr [design fuel usage];
C = 5 lbs CO/1000 gals [emission factor]; and
H = 121 mmBtu/hr [design heat input capacity].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 10.

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

2. Compliance with the annual CO, NOx, PE, and SO2 emission limitations of OAC rule 3745-31-05 (C) in Part III, Section A.I.1 of these terms and conditions shall be demonstrated in accordance with the emissions determination, as required in the record keeping section of Part III, Section A.III.2 above, using the synthetic minor potential to emit strategy contained in the "Permit to Install Application Supporting Documentation" prepared 10/21/03 by David Marczely, Environmental Design Group, 450 Grant Street, Akron, Ohio 44311, included in the application.

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

V. Testing Requirements (continued)

3. The permittee shall conduct emission and continuous emission monitoring (CEM) equipment performance testing for this emissions unit in accordance with the following requirements:

a. The testing shall be conducted in the period 18 to 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for NOx, in the appropriate averaging period(s), and the CEM performance testing shall be conducted, as required under 40 CFR 60.46b, in accordance with 40 CFR 60.8, using the continuous system for monitoring nitrogen oxides under 40 CFR 60.48b.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

7E.

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

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency 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.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

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

4. The permittee shall conduct, or have conducted, performance testing of the COMS in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1 and ASTM D 6216-98, following the manufacturer's specified quality assurance procedures. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Copies of the test results shall be submitted to Ohio EPA Central Office and Akron Air Quality.

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

V. Testing Requirements (continued)

5. The permittee demonstrated compliance with the NOx emission standards of OAC rule 3745-31-05 (A)(3) in Part III, Section A.I.1 at or near design capacity, while burning gas, and successfully completed certification of the NOx CEM system, in accordance with 40 CFR 60.8, 40 CFR 60.46b, and 40 CFR 60, Appendix B, Performance Specifications 2 & 3, during the emissions and performance testing conducted on December 12, 2001. A final test report was received at this office on January 14, 2002.

The permittee demonstrated compliance with the NOx and opacity emission standards of OAC rule 3745-31-05(A)(3) in Part III, Section A.I.1 at 70% of design capacity, while burning oil, during the emissions testing conducted on June 13, 2002. A final test report was received at this office on July 15, 2002.

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

6. The permittee shall have the option to remove the deration and corresponding steam flow rate output restriction of Part III, Section A.II.10 above by conducting emission testing of this emissions unit, when burning oil, in accordance with the following requirements:

a. The emission testing shall be conducted to demonstrate compliance with the visible particulate emissions limitation (% opacity) and the NOx mass emissions limitation (lbs NOx/mmBtu heat input), when burning oil.

b. The tests shall demonstrate compliance with the following allowable emission rates using the specified test methods:

20% opacity as a six-minute average, using Method 9 of 40 CFR Part 60, Appendix A; and

0.20 lb NOx/mmBtu heat input, using Method 7E of 40 CFR Part 60, Appendix A.

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

c. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. 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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

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

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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

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

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

3. Within 180 days of the effective date of PTI 16-02332, if not already done so, the permittee shall develop a written quality assurance/quality control plan for the COMS designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks and a description of preventive maintenance activities. The quality assurance/quality control plan and a logbook dedicated to the COMS must be kept on site and available for inspection during regular office hours.

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

4. Within 180 days of the effective date of PTI 16-02332, if not already done so, the permittee shall develop a written quality assurance/quality control plan for the NOx CEMS designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks and a description of preventive maintenance activities. The quality assurance/quality control plan and a logbook dedicated to the NOx CEMS must be kept on site and available for inspection during regular office hours.

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
121 million Btu/hr rated heat input natural gas/fuel oil-fired boiler	None	None

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: Solar Gas Turbine GT-1 (B008)

Activity Description: 64.18 MMBtu/Hr Natural Gas / Fuel Oil-fired Combustion Turbine-Solar Model Taurus 60

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
64.18 mmBtu/hr rated heat input natural gas/fuel oil-fired cogeneration gas turbine driving a 5 MW rated power output electrical generator and a heat recovery steam generator	OAC rule 3745-31-05(A)(3)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average. 0.014 lb PE/mmBtu heat input 0.13 lb carbon monoxide (CO)/mmBtu heat input when burning gas: 0.10 lb nitrogen oxides (NOx)/mmBtu heat input (25 ppmvd, mathematically adjusted to 15% oxygen as a diluent) when burning oil: 0.40 lb NOx/mmBtu heat input (98 ppmvd, mathematically adjusted to 15% oxygen as a diluent) The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C), and Part III, Section A.II below.
	OAC rule 3745-18-06(F)	0.5 lb sulfur dioxide (SO2)/mmBtu heat input
	40 CFR 60.332 40 CFR 60.333 OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)(4)	The emission control requirements specified by these rules are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B) OAC rule 3745-21-07(B) OAC 3745-23-06(B)	Part III, Section A.I.2.b.
	40 CFR Part 75	Part III, Section A.I.2.c.
	OAC rule 3745-103	

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05(C)	The following annual emissions limits, for B006 through B010 combined, are based upon a rolling, 12-month summation of the monthly emissions, and are restricted by the federally enforceable production limitations of Part III, Section A.II: 87.0 tons/year of CO; 99.0 tons/year of NOx; 9.5 tons/year of PE; and 99.0 tons/year of SO2.

2. Additional Terms and Conditions

2.a The mass emission limitations for PE, NOx, and CO established pursuant to OAC rule 3745-31-05(A)(3) are equal to or greater than the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to demonstrate compliance with these emission limitations.

However, if any proposed change(s), such as with fuel grade, quality, and/or heat content, heat input capacity, equipment changeover, etc., or any other change(s), increase(s) the potential to emit, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

2.b The permittee satisfies the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 and 3745-21-07(B), respectively, by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

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.

2.c If the permittee is subject to the requirements of 40 CFR Part 72 and 75 concerning acid rain, the permittee shall ensure that any effected 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.

II. Operational Restrictions

1. No oil, except No. 2 fuel oil with a heat content of at least 137,000 Btu/gal, and containing no more than 0.48%, by weight sulfur, and 3%, by weight nitrogen, shall be burned in this emissions unit.

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

2. No fuels, other than the oil specified above and natural gas, shall be burned in this emissions unit.

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

3. If burned exclusively, with no usage of gas, the maximum annual oil usage for emissions units B006 through B008, combined, shall not exceed 2.627 million gallons based upon a rolling, 12-month summation of the monthly oil usage rates.

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

II. Operational Restrictions (continued)

4. If burned exclusively, with no usage of gas, the maximum annual oil usage for emissions unit B008 shall not exceed 0.740 million gallons based upon a rolling, 12-month summation of the monthly oil usage rates.

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

5. If burned exclusively, with no usage of oil, the maximum annual gas usage for emissions units B006 through B010, combined, shall not exceed 1414 million cubic feet based upon a rolling, 12-month summation of the monthly gas usage rates.

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

6. If oil is substituted for gas in emissions units B006 and/or B007, then the annual limit of 1414 million cubic feet of natural gas shall be reduced by 71.5 cubic feet for each gallon of oil burned.

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

7. If oil is substituted for gas in emissions unit B008, then the annual limit of 1414 million cubic feet of natural gas shall be reduced by 540 cubic feet for each gallon of oil burned.

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall monitor the volume (i.e., the respective gallons of oil), and associated % by weight sulfur, % by weight nitrogen and Btu/gal of the oil burned in the turbine. The frequency of determination of these values shall be as follows:

a. If the turbine is supplied fuel oil from a bulk storage tank, the values shall be determined by sampling each delivery prior to combining it with fuel oil already in the intended storage tank.

b. If the turbine is supplied fuel oil without intermediate bulk storage, the values shall be determined and recorded daily. The permittee or fuel oil vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel oil supply. These custom schedules shall be substantiated with data and must be approved by the administrator before they can be used to comply with this section.

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

2. The permittee shall maintain monthly records of the following information for emissions units B006 through B010, combined:

a. the monthly amount of oil burned (gallons);
b. the rolling, 12-month amount of oil burned (gallons);
c. the monthly amount of gas burned (cubic feet);
d. the rolling, 12-month amount of gas burned (cubic feet);
e. the monthly emissions (tons) for each of CO, NOx, PE, and SO2; and
f. the rolling, 12-month emission rates (tons) for each CO, NOx, PE, and SO2.

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

IV. Reporting Requirements

1. The permittee shall submit quarterly reports certifying no fuel, except as specified above, was burned in this emissions unit during the preceding calendar quarter.

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

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel usage rates, each for oil and gas, as specified in Part III, A.II Operational Restrictions, as well as the corrective actions that were taken to achieve compliance.

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

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission rates, for CO, NOx, PE, and SO2, for emissions units B006 through B010, combined, as well as the corrective actions that were taken to achieve compliance.

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

4. Unless specified otherwise, all above quarterly deviation reports shall be submitted in accordance with the deadlines and other requirements specified in Part I - General Term and Condition 2 of this permit.

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

V. Testing Requirements

1. Compliance with the emission limitations of OAC rule 3745-31-05(A)(3) in Part III, Section A.I.1 of these terms and conditions shall be demonstrated in accordance with the following methods, assuming heat contents of 137,000 Btu/gallon of oil & 1000 Btu/cubic foot of gas:

[Note: Burning No.2 fuel (distillate) oil represents the worst-case potential emissions of PE, SO2, NOx, and CO from this emissions unit.]

1.a Emission Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method: Compliance with the visible PE shall be demonstrated in accordance with Method 9 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1))

1.b Emission Limitation: 0.014 lb PE/mmBtu heat input

Applicable Compliance Method: The potential to emit is equal to the above emissions limitation, as demonstrated below:

E = 0.014 lb PE/mmBtu heat input [potential emissions per AP-42, 9/98, Table 3.1-1].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 5.

(Authority for term: OAC rule 3745-17-03(B)(9), OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

1.c Emission Limitation: 0.5 lb SO2/mmBtu heat input

Applicable Compliance Method: The potential to emit is less than the above emission limitation, as demonstrated below:

E = 0.48 lb SO2/mmBtu heat input [AP-42, 4/00, Table 3.1-2a, distillate oil-fired].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 6.

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

V. Testing Requirements (continued)

1.d Emission Limitations: 0.10 lb NOx/mmBtu heat input (natural gas); & 0.40 lb NOx/mmBtu heat input (No. 2 fuel oil)

Applicable Compliance Method: The potential to emit is equal to the above emission limitations, as demonstrated below:

E = 0.10 lb NOx/mmBtu heat input [manufacturer's specifications, natural gas-fired]; &
E = 0.40 lb NOx/mmBtu heat input [manufacturer's specifications, distillate oil-fired];

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 7E.

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

1.e Emission Limitation: 0.13 lb CO/mmBtu heat input

Applicable Compliance Method: The potential to emit is equal to the above emission limitation, as demonstrated below:

E = 0.13 lb CO/mmBtu heat input [manufacturer's specifications, distillate oil-fired];

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 10.

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

2. Compliance with the fuel sulfur content and nitrogen content restrictions of this permit shall be determined by any qualified person as follows:

a. sulfur content: ASTM D 2880-71 shall be used for liquid fuels, and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for gaseous fuels. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

b. nitrogen content: analytical methods and procedures shall be used for the fuel burned that are accurate to within 5% and are approved by the Administrator.

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

3. Compliance with the annual CO, NOx, PE, and SO2 emission limitations of OAC rule 3745-31-05 (C) in Part III, Section A.I.1 of these terms and conditions shall be demonstrated in accordance with the emissions determination, as required in the record keeping section of Part III, Section A.III.2 above, using the synthetic minor potential to emit strategy contained in the "Permit to Install Application Supporting Documentation" prepared 10/21/03 by David Marczely, Environmental Design Group, 450 Grant Street, Akron, Ohio 44311, included in the application.

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

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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

VI. Miscellaneous Requirements (continued)

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

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
64.18 mmBtu/hr rated heat input natural gas/fuel oil-fired cogeneration gas turbine driving a 5 MW rated power output electrical generator and a heat recovery steam generator	None	None

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: Duct Burner (B009)

Activity Description: 76.02 MMBtu/Hr Natural Gas-fired Duct Burner- Coen

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
76.2 mmBtu/hr natural gas-fired duct burner providing supplemental heat to a heat recovery steam generator	OAC rule 3745-31-05(A)(3)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average. 0.010 lb PE/mmBtu heat input 0.10 lb nitrogen oxides (NOx)/mmBtu heat input 0.080 lb carbon monoxide (CO)/mmBtu heat input Only natural gas shall be burned in this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C), and Part III, Section A.II below.
	OAC rule 3745-17-07(A) OAC rule 3745-17-10(B) OAC rule 3745-18-06(A)	The emission control requirements specified by these rules are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B) OAC 3745-23-06(B)	See Part III, Section A.I.2.b below.
	OAC rule 3745-31-05(C)	The following annual emissions limits, for B006 through B010 combined, are based upon a rolling, 12-month summation of the monthly emissions, and are restricted by the federally enforceable production limitations of Part III, Section A.II: 87.0 tons/year of CO; 99.0 tons/year of NOx; 9.5 tons/year of PE; and 99.0 tons/year of SO2.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	40 CFR Part 60, Subpart Dc	Exempt from the emission standards of this rule since only natural gas is burned.

2. Additional Terms and Conditions

2.a The mass emission limitations for PE, NOx, and CO established pursuant to OAC rule 3745-31-05(A)(3) are equal to the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to demonstrate compliance with these emission limitations.

However, if any proposed change(s), such as with fuel grade, quality, and/or heat content, heat input capacity, equipment changeover, etc., or any other change(s), increase(s) the potential to emit, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

2.b The permittee satisfies the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

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.

II. Operational Restrictions

1. If burned exclusively, with no usage of gas, the maximum annual oil usage for emissions units B006 through B008, combined, shall not exceed 2.627 million gallons based upon a rolling, 12-month summation of the monthly oil usage rates.

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

2. If burned exclusively, with no usage of gas, the maximum annual oil usage for emissions unit B008 shall not exceed 0.740 million gallons based upon a rolling, 12-month summation of the monthly oil usage rates.

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

3. If burned exclusively, with no usage of oil, the maximum annual gas usage for emissions units B006 through B010, combined, shall not exceed 1414 million cubic feet based upon a rolling, 12-month summation of the monthly gas usage rates.

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

4. If oil is substituted for gas in emissions units B006 and/or B007, then the annual limit of 1414 million cubic feet of natural gas shall be reduced by 71.5 cubic feet for each gallon of oil burned.

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

5. If oil is substituted for gas in emissions unit B008, then the annual limit of 1414 million cubic feet of natural gas shall be reduced by 540 cubic feet for each gallon of oil burned.

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records of the volume (cubic feet) and corresponding heat content (Btu per standard cubic foot) and sulfur content (pounds per million standard cubic foot) of natural gas burned in this emissions unit.

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

2. The permittee shall maintain monthly records of the following information for emissions units B006 through B010, combined:

a. the monthly amount of oil burned (gallons);
b. the rolling, 12-month amount of oil burned (gallons);
c. the monthly amount of gas burned (cubic feet);
d. the rolling, 12-month amount of gas burned (cubic feet);
e. the monthly emissions (tons) for each of CO, NOx, PE, and SO2; and
f. the rolling, 12-month emission rates (tons) for each CO, NOx, PE, and SO2.

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

IV. Reporting Requirements

1. The permittee shall submit quarterly reports certifying no fuel, except as specified above in Part III, A.I Applicable Emissions Limitations/Control Measures, was burned in this emissions unit during the preceding calendar quarter.

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

2. In accordance with 40 CFR 60.48c, the permittee shall submit notification of the date of construction, anticipated startup, and actual startup, as provided by paragraph 60.7 of this part. The notification shall include the design heat input capacity of this steam generating unit and identification of the fuels to be combusted in the subject unit.

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

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel usage rates, each for oil and gas, as specified in Part III, A.II Operational Restrictions, as well as the corrective actions that were taken to achieve compliance.

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

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission rates, for CO, NOx, PE, and SO2, for emissions units B006 through B010, combined, as well as the corrective actions that were taken to achieve compliance.

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

5. Unless specified otherwise, all above quarterly deviation reports shall be submitted in accordance with the deadlines and other requirements specified in Part I - General Term and Condition 2 of this permit.

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

V. Testing Requirements

1. Compliance with the emission limitations of OAC rule 3745-31-05(A)(3) in Part III, Section A.I.1 of these terms and conditions shall be demonstrated in accordance with the following methods, assuming a heat content of 1000 Btu/cubic foot of gas:

V. Testing Requirements (continued)

1.a Emission Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method: Compliance with the visible PE shall be demonstrated in accordance with Method 9 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1))

1.b Emission Limitation: 0.010 lb PE/mmBtu heat input

Applicable Compliance Method: The potential to emit is equal to the above emission limitation, as demonstrated below:

E = 0.010 lb PE/mmBtu heat input [manufacturer's potential to emit test data];

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 5.

(Authority for term: OAC rule 3745-17-03(B)(9), OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

1.c Emission Limitations: 0.10 lb NOx/mmBtu heat input

Applicable Compliance Method: The potential to emit is equal to the above emission limitation, as demonstrated below:

E = 0.10 lb NOx/mmBtu heat input [manufacturer's potential to emit test data];

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 7E.

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

1.d Emission Limitation: 0.080 lb CO/mmBtu heat input

Applicable Compliance Method: The potential to emit is equal to the above emission limitation, as demonstrated below:

E = 0.080 lb CO/mmBtu heat input [manufacturer's potential to emit test data];

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 10.

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

2. Compliance with the annual CO, NOx, PE, and SO2 emission limitations of OAC rule 3745-31-05 (C) in Part III, Section A.I.1 of these terms and conditions shall be demonstrated in accordance with the emissions determination, as required in the record keeping section of Part III, Section A.III.2 above, using the synthetic minor potential to emit strategy contained in the "Permit to Install Application Supporting Documentation" prepared 10/21/03 by David Marczely, Environmental Design Group, 450 Grant Street, Akron, Ohio 44311, included in the application.

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

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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

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

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
76.2 mmBtu/hr natural gas-fired duct burner providing supplemental heat to a heat recovery steam generator	None	None

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: Solar Gas Turbine GT-2 (B010)

Activity Description: 76.0 MMBtu/Hr Natural Gas-fired Combustion Turbine-Solar Model Taurus 70

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
76.0 mmBtu/hr rated heat input natural gas-fired cogeneration gas turbine driving a 7 MW rated power output electrical generator and a heat recovery steam generator	OAC rule 3745-31-05(A)(3)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average. 0.014 lb PE/mmBtu heat input 0.13 lb carbon monoxide (CO)/mmBtu heat input 0.10 lb nitrogen oxides (NOx)/mmBtu heat input (25 ppmvd, mathematically adjusted to 15% oxygen as a diluent). Only natural gas shall be burned in this emissions unit. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C), and Part III, Section A.II below.
	40 CFR 60.332 40 CFR 60.333 OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)(4) OAC rule 3745-18-06(A)	The emission control requirements specified by these rules are less stringent than the emission control requirements established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B) OAC 3745-23-06(B)	Part III, Section A.I.2.b below.
	40 CFR Part 75	Part III, Section A.I.2.c below.
	OAC rule 3745-103	

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05(C)	The following annual emissions limits, for B006 through B010 combined, are based upon a rolling, 12-month summation of the monthly emissions, and are restricted by the federally enforceable production limitations of Part III, Section A.II: 87.0 tons/year of CO; 99.0 tons/year of NOx; 9.5 tons/year of PE; and 99.0 tons/year of SO2.

2. Additional Terms and Conditions

2.a The mass emission limitations for PE, NOx, and CO established pursuant to OAC rule 3745-31-05(A)(3) are equal to or greater than the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping, or reporting requirements are necessary to demonstrate compliance with these emission limitations.

However, if any proposed change(s), such as with fuel grade, quality, and/or heat content, heat input capacity, equipment changeover, etc., or any other change(s), increase(s) the potential to emit, then the permittee shall apply for and obtain either a modification to the permit to install or a new final permit to install prior to the change(s).

2.b The permittee satisfies the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08 by complying with the best available technology requirements of OAC rule 3745-31-05(A)(3).

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.

2.c If the permittee is subject to the requirements of 40 CFR Part 72 and 75 concerning acid rain, the permittee shall ensure that any effected 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.

II. Operational Restrictions

1. No fuels, other than natural gas, shall be burned in this emissions unit.

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

2. If burned exclusively, with no usage of gas, the maximum annual oil usage for emissions units B006 through B008, combined, shall not exceed 2.627 million gallons based upon a rolling, 12-month summation of the monthly oil usage rates.

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

3. If burned exclusively, with no usage of gas, the maximum annual oil usage for emissions unit B008 shall not exceed 0.740 million gallons based upon a rolling, 12-month summation of the monthly oil usage rates.

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

II. Operational Restrictions (continued)

4. If burned exclusively, with no usage of oil, the maximum annual gas usage for emissions units B006 through B010, combined, shall not exceed 1414 million cubic feet based upon a rolling, 12-month summation of the monthly gas usage rates.

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

5. If oil is substituted for gas in emissions units B006 and/or B007, then the annual limit of 1414 million cubic feet of natural gas shall be reduced by 71.5 cubic feet for each gallon of oil burned.

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

6. If oil is substituted for gas in emissions unit B008, then the annual limit of 1414 million cubic feet of natural gas shall be reduced by 540 cubic feet for each gallon of oil burned.

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

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for emissions units B006 through B010, combined:

a. the monthly amount of oil burned (gallons);
b. the rolling, 12-month amount of oil burned (gallons);
c. the monthly amount of gas burned (cubic feet);
d. the rolling, 12-month amount of gas burned (cubic feet);
e. the monthly emissions (tons) for each of CO, NOx, PE, and SO2; and
f. the rolling, 12-month emission rates (tons) for each CO, NOx, PE, and SO2.

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

IV. Reporting Requirements

1. The permittee shall submit quarterly reports certifying no fuel, except natural gas, was burned in this emissions unit during the preceding calendar quarter.

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

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel usage rates, each for oil and gas, as specified in Part III, A.II Operational Restrictions, as well as the corrective actions that were taken to achieve compliance.

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

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission rates, for CO, NOx, PE, and SO2, for emissions units B006 through B010, combined, as well as the corrective actions that were taken to achieve compliance.

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

4. Unless specified otherwise, all above quarterly deviation reports shall be submitted in accordance with the deadlines and other requirements specified in Part I - General Term and Condition 2 of this permit.

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

V. Testing Requirements

1. Compliance with the emission limitations of OAC rule 3745-31-05(A)(3) in Part III, Section A.I.1 of these terms and conditions shall be demonstrated in accordance with the following methods, assuming heat contents of 137,000 Btu/gallon of oil & 1000 Btu/cubic foot of gas:

V. Testing Requirements (continued)

1.a Emission Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method: Compliance with the visible PE shall be demonstrated in accordance with Method 9 of 40 CFR Part 60, Appendix A.

(Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1))

1.b Emission Limitation: 0.014 lb PE/mmBtu heat input

Applicable Compliance Method: The potential to emit is equal to the above emissions limitation, as demonstrated below:

E = 0.014 lb PE/mmBtu heat input [potential emissions per AP-42, 9/98, Table 3.1-1].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 5.

(Authority for term: OAC rule 3745-17-03(B)(9), OAC rule 3745-31-05(A)(3) and OAC rule 3745-77-07(C)(1))

1.c Emission Limitations: 0.10 lb NOx/mmBtu heat input

Applicable Compliance Method: The potential to emit is equal to the above emission limitation, as demonstrated below:

E = 0.10 lb NOx/mmBtu heat input [potential emissions per manufacturer's specifications].

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 7E.

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

1.d Emission Limitation: 0.13 lb CO/mmBtu heat input

Applicable Compliance Method: The potential to emit is less than the above emission limitation, as demonstrated below:

E = 0.122 lb CO/mmBtu heat input [potential emissions per manufacturer's specifications];

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4 and 10.

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

2. Compliance with the fuel sulfur content and nitrogen content restrictions of this permit shall be determined by any qualified person as follows:

a. sulfur content: ASTM D 2880-71 shall be used for liquid fuels, and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for gaseous fuels. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

b. nitrogen content: analytical methods and procedures shall be used for the fuel burned that are accurate to within 5% and are approved by the Administrator.

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

V. Testing Requirements (continued)

3. Compliance with the annual CO, NOx, PE, and SO2 emission limitations of OAC rule 3745-31-05 (C) in Part III, Section A.I.1 of these terms and conditions shall be demonstrated in accordance with the emissions determination, as required in the record keeping section of Part III, Section A.III.2 above, using the synthetic minor potential to emit strategy contained in the "Permit to Install Application Supporting Documentation" prepared 10/21/03 by David Marczely, Environmental Design Group, 450 Grant Street, Akron, Ohio 44311, included in the application.

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

VI. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

In addition, for this new emissions unit other air dispersion modeling requirements pursuant to OEPA's Engineering Guide number 69 are exempt because it has been determined that the shut down of existing coal fired boilers and other emissions units at the facility are considered to be an environmentally beneficial project per discussions with Ohio EPA air dispersion modeling staff.

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

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

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

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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
76.0 mmBtu/hr rated heat input natural gas-fired cogeneration gas turbine driving a 7 MW rated power output electrical generator and a heat recovery steam generator	None	None

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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