



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

05/28/03

**RE: Proposed Title V Chapter 3745-77 Permit  
14-83-09-0334 Procter & Gamble Company Health  
Care Research Center**

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

Dear Ms. Damico:

The proposed issuance of the Title V permit for Procter & Gamble Company Health Care Research Center, has been created in Ohio EPA's State Air Resources System (STARS) on 05/28/03, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit -+0 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, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

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



State of Ohio Environmental Protection Agency

**PROPOSED TITLE V PERMIT**

Issue Date: 05/28/03	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: 14-83-09-0334 to:  
 Procter & Gamble Company Health Care Research Center  
 8700 Mason Montgomery Road  
 Mason, OH 45040-9462

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

B001 (Boiler No. 3) Boiler for process steam and building heat.	Boiler for process steam and building heat.	Diesel-fired emergency generator.
B002 (Boiler No. 2) Boiler for process steam and building heat.	P001 (Emergency Generator No. 1) Diesel-fired emergency generator.	P003 (Emergency Generator No. 3) Diesel-fired emergency generator.
B003 (Boiler No. 1)	P002 (Emergency Generator No. 2)	

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

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

**OHIO ENVIRONMENTAL PROTECTION AGENCY**

---

Christopher Jones  
 Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Section

#### 1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, 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. 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))*

ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

- (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. 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. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-

07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))*

- (b) 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 deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement 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. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))*

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. 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. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

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

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

## 2. **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 unit(s) 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 OAC rule 3745-15-06, 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).  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))*

## 3. **Risk Management Plans**

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

*(Authority for term: OAC rule 3745-77-07(A)(4))*

## 4. **Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

*(Authority for term: OAC rule 3745-77-07(A)(5))*

## 5. **Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

## 6. **General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is

grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.  
*(Authority for term: OAC rule 3745-77-07(A)(7))*

**7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.  
*(Authority for term: OAC rule 3745-77-07(A)(8))*

**8. Marketable Permit Programs**

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.  
*(Authority for term: OAC rule 3745-77-07(A)(9))*

**9. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.  
*(Authority for term: OAC rule 3745-77-07(A)(10))*

**10. Reopening for Cause**

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

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

*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

## **11. Federal and State Enforceability**

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

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

## **12. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

- iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.
    - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

### **13. Permit Shield**

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

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

#### **14. Operational Flexibility**

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

#### **15. Emergencies**

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

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

#### **16. Off-Permit Changes**

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission 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.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.) *(Authority for term: OAC rule 3745-77-07(I))*

**17. Compliance Method Requirements**

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

*(This term is provided for informational purposes only.)*

**18. Insignificant Activities**

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

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

**19. Permit to Install Requirement**

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

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

**20. Air Pollution Nuisance**

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

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

**B. *State Only Enforceable Section***

**1. Reporting Requirements Related to Monitoring and Record Keeping Requirements**

The permittee shall submit required reports in the following manner:

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

**2. Records Retention Requirements**

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

**3. Inspections and Information Requests**

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

**4. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with

paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

**5. Permit Transfers**

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

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

## **Part II - Specific Facility Terms and Conditions**

### **A. State and Federally Enforcable Section**

1. The permittee shall maintain, service, repair, or dispose of equipment containing any class I or class II substance used as refrigerant in such equipment pursuant to the applicable provisions of 40 CFR Part 82.

### **B. State Only Enforceable Section**

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

P004 - diesel operated fire pump; and  
T001 - 75,000-gallon distillate oil storage tank.

Each insignificant emissions unit must comply with all State and federal regulations, as well as any emission limitations and/or control requirements within a permit to install for that emissions unit.

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Boiler No. 3 (B001)  
**Activity Description:** Boiler for process steam and building heat.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B001 - 100 mmBtu/hour distillate fuel oil/natural gas-fired boiler	OAC rule 3745-31-05(A)(3) (PTI 14-02713)	0.50 lb sulfur dioxide (SO <sub>2</sub> )/mmBtu of actual heat input; 0.15 lb nitrogen oxides (NO <sub>x</sub> )/mmBtu of actual heat input; 0.20 lb carbon monoxide(CO)/mmBtu of actual heat input; and 0.015 lb volatile organic compounds(VOC)/mmBtu of actual heat input.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-10(B)(1), 3745-21-08(B) and 3745-23-06(B) and 40 CFR Part 60 Subpart Dc.
	OAC rule 3745-31-05(D) (PTI 14-02713)	See A.II and A.I.2.c.
	OAC rule 3745-17-07(A)	The visible emission limitations specified in OAC 3745-17-07(A) are less stringent than the visible emission limitations specified in 40 CFR Part 60 Subpart Dc.
	OAC rule 3745-17-10(B)(1)	The particulate emissions (PE) from this emissions unit shall not exceed 0.020 lb per mmBtu of actual heat input.
	OAC rule 3745-18-06(D)	The sulfur dioxide emission limitation specified in OAC 3745-18-06(D) is less stringent than the sulfur dioxide emission limitation established in accordance with OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	None, see section A.I.2.a below.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-23-06(B) 40 CFR Part 60 Subpart Dc	None, see section A.I.2.b below.  Excluding periods of startup, shutdown, or malfunction, visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except for one six-minute period per hour of not more than 27% opacity.

**2. Additional Terms and Conditions**

**2.a** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-02713.

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.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 by committing to comply with the synthetic minor limitations established pursuant to OAC rule 3745-31-05(D) and 3745-31-05(A)(3) in Permit to Install 14-02713.

**2.c** The total combined emissions from emissions units B001-B003 shall not exceed the following based on a rolling, 12-month summation:

- 8.55 TPY PE\*
- 16.43 TPY VOC
- 219.0 TPY CO
- 164.25 TPY NO<sub>x</sub>
- 18.38 TPY SO<sub>2</sub>

\*For purposes of Prevention of Significant Deterioration applicability, all PM<sub>10</sub> emissions are assumed to be PE.

**II. Operational Restrictions**

1. The total amount of distillate fuel oil burned in emissions units B001-B003, combined, shall not exceed 500,000 gallons per year based upon a rolling, 12-month summation.
2. When burning fuel oil in this emissions unit, the permittee shall only use distillate oil (fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils") in this emissions unit. The sulfur content of the distillate oil shall not exceed 0.5 percent sulfur by weight.
3. The permittee shall burn only natural gas and/or distillate fuel oil in this emissions unit.
4. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.I. above.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

- a. Alternative 1:

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

- b. Alternative 2:

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

2. The permittee shall collect and record the following information on a monthly basis:
  - a. The total amounts of natural gas and fuel oil burned in emissions units B001- B003, combined.
  - b. The rolling, 12-month summation of the fuel oil usage totals recorded pursuant to A.III.2.a (i.e., the current month's total added to the previous 11-month total).
3. For each day during which the permittee burns a fuel other than natural gas and/or a distillate oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or distillate oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel oil usage limitation of 500,000 gallons.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

## V. Testing Requirements

1. Compliance with the emission limitations specified in this permit shall be determined in accordance with the following methods:

### Emission Limitations-

0.020 lb of PE/mmBtu of actual heat input

8.55 TPY of PE, from emissions units B001-B003 combined.

### Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the maximum natural gas usage rate of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hr).

### Applicable compliance method when burning fuel oil-

For the use of fuel oil, compliance may be determined by multiplying the maximum fuel oil usage rate of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

2. Emission Limitations -

0.50 lb of SO<sub>2</sub>/mmBtu of actual heat input

The sulfur content of the distillate oil shall not exceed 0.5 percent sulfur by weight.

18.38 TPY of SO<sub>2</sub> from emissions units B001-B003 combined.

### Applicable compliance method when burning fuel oil-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month or each daily sample meets the limitation.

### Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas usage rate of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO<sub>2</sub>/MM cu. ft and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hr).

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

## V. Testing Requirements (continued)

3. Emission Limitations-  
0.15 lb of NO<sub>x</sub>/mmBtu of actual heat input  
164.25 TPY of NO<sub>x</sub>, from emissions units B001-B003 combined.

Applicable compliance method when burning natural gas or fuel oil-  
The emission factor of 0.15 lb of NO<sub>x</sub>/mmBtu of actual heat input is based upon a performance guarantee by the burner manufacturer, COEN Company, Inc. dated July 13, 1992.

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

4. Emission Limitations-  
0.20 lb of CO/mmBtu of actual heat input  
219.0 TPY of CO, from emissions units B001-B003 combined.

Applicable compliance method when burning natural gas or fuel oil-  
The emission factor of 0.20 lb of CO/mmBtu of actual heat input is based upon a performance guarantee by the burner manufacturer, COEN Company, Inc. dated July 13, 1992.

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

5. Emission Limitations-  
0.015 lb of VOC/mmBtu of actual heat input  
16.43 TPY of VOC, from emissions units B001-B003 combined.

Applicable compliance method when burning natural gas or fuel oil-  
The emission factor of 0.015 lb of VOC/mmBtu of actual heat input is based upon a performance guarantee by the burner manufacturer, COEN Company, Inc. dated July 13, 1992.

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

6. Emission Limitation-  
Visible particulate emissions shall not exceed 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method-

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

Facility Name: **Health Care Research Center**

Facility ID: **14-83-09-0334**

Emissions Unit: **Boiler No. 3 (B001)**

**V. Testing Requirements (continued)**

7. Compliance with the total combined fuel oil usage limitation in A.II.1 shall be determined by the record keeping in A.III.2.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

**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:** Boiler No. 2 (B002)  
**Activity Description:** Boiler for process steam and building heat.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B002 - 100 mmBtu/hour distillate fuel oil/natural gas-fired boiler	OAC rule 3745-31-05(A)(3) (PTI 14-02713)	0.50 lb sulfur dioxide (SO <sub>2</sub> )/mmBtu of actual heat input; 0.15 lb nitrogen oxides (NO <sub>x</sub> )/mmBtu of actual heat input; 0.20 lb carbon monoxide(CO)/mmBtu of actual heat input; and 0.015 lb volatile organic compounds(VOC)/mmBtu of actual heat input.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-10(B)(1), 3745-21-08(B) and 3745-23-06(B) and 40 CFR Part 60 Subpart Dc.
	OAC rule 3745-31-05(D) (PTI 14-02713)	See A.II and A.I.2.c.
	OAC rule 3745-17-07(A)	The visible emission limitations specified in OAC 3745-17-07(A) are less stringent than the visible emission limitations specified in 40 CFR Part 60 Subpart Dc.
	OAC rule 3745-17-10(B)(1)	The particulate emissions (PE) from this emissions unit shall not exceed 0.020 lb per mmBtu of actual heat input.
	OAC rule 3745-18-06(D)	The sulfur dioxide emission limitation specified in OAC 3745-18-06(D) is less stringent than the sulfur dioxide emission limitation established in accordance with OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	None, see section A.I.2.a below.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-23-06(B) 40 CFR Part 60 Subpart Dc	None, see section A.I.2.b below.  Excluding periods of startup, shutdown, or malfunction, visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except for one six-minute period per hour of not more than 27% opacity.

**2. Additional Terms and Conditions**

**2.a** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-02713.

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.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 by committing to comply with the synthetic minor limitations established pursuant to OAC rule 3745-31-05(D) and 3745-31-05(A)(3) in Permit to Install 14-02713.

**2.c** The total combined emissions from emissions units B001-B003 shall not exceed the following based on a rolling, 12-month summation:

- 8.55 TPY PE\*
- 16.43 TPY VOC
- 219.0 TPY CO
- 164.25 TPY NO<sub>x</sub>
- 18.38 TPY SO<sub>2</sub>

\*For purposes of Prevention of Significant Deterioration applicability, all PM<sub>10</sub> emissions are assumed to be PE.

**II. Operational Restrictions**

1. The total amount of distillate fuel oil burned in emissions units B001-B003, combined, shall not exceed 500,000 gallons per year based upon a rolling, 12-month summation.
2. When burning fuel oil in this emissions unit, the permittee shall only use distillate oil (fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils") in this emissions unit. The sulfur content of the distillate oil shall not exceed 0.5 percent sulfur by weight.
3. The permittee shall burn only natural gas and/or distillate fuel oil in this emissions unit.
4. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.I. above.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

- a. Alternative 1:

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

- b. Alternative 2:

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

2. The permittee shall collect and record the following information on a monthly basis:
  - a. The total amounts of natural gas and fuel oil burned in emissions units B001- B003, combined.
  - b. The rolling, 12-month summation of the fuel oil usage totals recorded pursuant to A.III.2.a (i.e., the current month's total added to the previous 11-month total).
3. For each day during which the permittee burns a fuel other than natural gas and/or a distillate oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or distillate oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel oil usage limitation of 500,000 gallons.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

## V. Testing Requirements

1. Compliance with the emission limitations specified in this permit shall be determined in accordance with the following methods:

### Emission Limitations-

0.020 lb of PE/mmBtu of actual heat input

8.55 TPY of PE, from emissions units B001-B003 combined.

### Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the maximum natural gas usage rate of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hr).

### Applicable compliance method when burning fuel oil-

For the use of fuel oil, compliance may be determined by multiplying the maximum fuel oil usage rate of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

2. Emission Limitations -

0.50 lb of SO<sub>2</sub>/mmBtu of actual heat input

The sulfur content of the distillate oil shall not exceed 0.5 percent sulfur by weight.

18.38 TPY of SO<sub>2</sub> from emissions units B001-B003 combined.

### Applicable compliance method when burning fuel oil-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month or each daily sample meets the limitation.

### Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas usage rate of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO<sub>2</sub>/MM cu. ft and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hr).

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

## V. Testing Requirements (continued)

3. Emission Limitations-  
0.15 lb of NO<sub>x</sub>/mmBtu of actual heat input  
164.25 TPY of NO<sub>x</sub>, from emissions units B001-B003 combined.

Applicable compliance method when burning natural gas or fuel oil-  
The emission factor of 0.15 lb of NO<sub>x</sub>/mmBtu of actual heat input is based upon a performance guarantee by the burner manufacturer, COEN Company, Inc. dated July 13, 1992.

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

4. Emission Limitations-  
0.20 lb of CO/mmBtu of actual heat input  
219.0 TPY of CO, from emissions units B001-B003 combined.

Applicable compliance method when burning natural gas or fuel oil-  
The emission factor of 0.20 lb of CO/mmBtu of actual heat input is based upon a performance guarantee by the burner manufacturer, COEN Company, Inc. dated July 13, 1992.

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

5. Emission Limitations-  
0.015 lb of VOC/mmBtu of actual heat input  
16.43 TPY of VOC, from emissions units B001-B003 combined.

Applicable compliance method when burning natural gas or fuel oil-  
The emission factor of 0.015 lb of VOC/mmBtu of actual heat input is based upon a performance guarantee by the burner manufacturer, COEN Company, Inc. dated July 13, 1992.

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

6. Emission Limitation-  
Visible particulate emissions shall not exceed 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method-

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

**V. Testing Requirements (continued)**

7. Compliance with the total combined fuel oil usage limitation in A.II.1 shall be determined by the record keeping in A.III.2.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

**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:** Boiler No. 1 (B003)  
**Activity Description:** Boiler for process steam and building heat.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B003 - 50 mmBtu/hour distillate fuel oil/natural gas-fired boiler	OAC rule 3745-31-05(A)(3) (PTI 14-02713)	0.50 lb sulfur dioxide (SO <sub>2</sub> )/mmBtu of actual heat input; 0.15 lb nitrogen oxides (NO <sub>x</sub> )/mmBtu of actual heat input; 0.20 lb carbon monoxide(CO)/mmBtu of actual heat input; and 0.015 lb volatile organic compounds(VOC)/mmBtu of actual heat input.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-10(B)(1), 3745-21-08(B) and 3745-23-06(B) and 40 CFR Part 60 Subpart Dc.
	OAC rule 3745-31-05(D) (PTI 14-02713)	See A.II and A.I.2.c.
	OAC rule 3745-17-07(A)	The visible emission limitations specified in OAC 3745-17-07(A) are less stringent than the visible emission limitations specified in 40 CFR Part 60 Subpart Dc.
	OAC rule 3745-17-10(B)(1)	The particulate emissions (PE) from this emissions unit shall not exceed 0.020 lb per mmBtu of actual heat input.
	OAC rule 3745-18-06(D)	The sulfur dioxide emission limitation specified in OAC 3745-18-06(D) is less stringent than the sulfur dioxide emission limitation established in accordance with OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08(B)	None, see section A.I.2.a below.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-23-06(B) 40 CFR Part 60 Subpart Dc	None, see section A.I.2.b below.  Excluding periods of startup, shutdown, or malfunction, visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except for one six-minute period per hour of not more than 27% opacity.

**2. Additional Terms and Conditions**

**2.a** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-02713.

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.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 by committing to comply with the synthetic minor limitations established pursuant to OAC rule 3745-31-05(D) and 3745-31-05(A)(3) in Permit to Install 14-02713.

**2.c** The total combined emissions from emissions units B001-B003 shall not exceed the following based on a rolling, 12-month summation:

- 8.55 TPY PE\*
- 16.43 TPY VOC
- 219.0 TPY CO
- 164.25 TPY NO<sub>x</sub>
- 18.38 TPY SO<sub>2</sub>

\*For purposes of Prevention of Significant Deterioration applicability, all PM<sub>10</sub> emissions are assumed to be PE.

**II. Operational Restrictions**

1. The total amount of distillate fuel oil burned in emissions units B001-B003, combined, shall not exceed 500,000 gallons per year based upon a rolling, 12-month summation.
2. When burning fuel oil in this emissions unit, the permittee shall only use distillate oil (fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils") in this emissions unit. The sulfur content of the distillate oil shall not exceed 0.5 percent sulfur by weight.
3. The permittee shall burn only natural gas and/or distillate fuel oil in this emissions unit.
4. The quality of the oil burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable sulfur dioxide emission limitation specified in Section A.I. above.

### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

- a. Alternative 1:

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

- b. Alternative 2:

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

2. The permittee shall collect and record the following information on a monthly basis:
  - a. The total amounts of natural gas and fuel oil burned in emissions units B001- B003, combined.
  - b. The rolling, 12-month summation of the fuel oil usage totals recorded pursuant to A.III.2.a (i.e., the current month's total added to the previous 11-month total).
3. For each day during which the permittee burns a fuel other than natural gas and/or a distillate oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

### IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or distillate oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month fuel oil usage limitation of 500,000 gallons.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

## V. Testing Requirements

1. Compliance with the emission limitations specified in this permit shall be determined in accordance with the following methods:

### Emission Limitations-

0.020 lb of PE/mmBtu of actual heat input

8.55 TPY of PE, from emissions units B001-B003 combined.

### Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the maximum natural gas usage rate of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 1.9 lbs filterable PE/MM cu. ft, and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hr).

### Applicable compliance method when burning fuel oil-

For the use of fuel oil, compliance may be determined by multiplying the maximum fuel oil usage rate of the emissions unit (gallons/hr) by the AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (revised 9/98) emission factor of 2.0 lbs filterable PE/1000 gallons, and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hr).

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

2. Emission Limitations -

0.50 lb of SO<sub>2</sub>/mmBtu of actual heat input

The sulfur content of the distillate oil shall not exceed 0.5 percent sulfur by weight.

18.38 TPY of SO<sub>2</sub> from emissions units B001-B003 combined.

### Applicable compliance method when burning fuel oil-

Compliance with the allowable sulfur dioxide emission limitation shall be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month or each daily sample meets the limitation.

### Applicable compliance method when burning only natural gas-

For the use of natural gas, compliance may be determined by multiplying the hourly gas usage rate of the emissions unit (MM cu. ft/hr) by the AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (revised 7/98) emission factor of 0.6 lb SO<sub>2</sub>/MM cu. ft and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hr).

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

## V. Testing Requirements (continued)

3. Emission Limitations-  
0.15 lb of NO<sub>x</sub>/mmBtu of actual heat input  
164.25 TPY of NO<sub>x</sub>, from emissions units B001-B003 combined.

Applicable compliance method when burning natural gas or fuel oil-  
The emission factor of 0.15 lb of NO<sub>x</sub>/mmBtu of actual heat input is based upon a performance guarantee by the burner manufacturer, COEN Company, Inc. dated July 13, 1992.

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

4. Emission Limitations-  
0.20 lb of CO/mmBtu of actual heat input  
219.0 TPY of CO, from emissions units B001-B003 combined.

Applicable compliance method when burning natural gas or fuel oil-  
The emission factor of 0.20 lb of CO/mmBtu of actual heat input is based upon a performance guarantee by the burner manufacturer, COEN Company, Inc. dated July 13, 1992.

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

5. Emission Limitations-  
0.015 lb of VOC/mmBtu of actual heat input  
16.43 TPY of VOC, from emissions units B001-B003 combined.

Applicable compliance method when burning natural gas or fuel oil-  
The emission factor of 0.015 lb of VOC/mmBtu of actual heat input is based upon a performance guarantee by the burner manufacturer, COEN Company, Inc. dated July 13, 1992.

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

Compliance with the annual emission limitation shall be assumed as long as compliance is maintained with the lb/mmBtu limitation specified in A.I.2 and the fuel oil usage restriction specified in A.II.1. (Should the actual annual emission rate need to be calculated, the annual emission rate shall be calculated by using the emission factors and methodologies specified above and the fuel usage information collected and recorded in A.III.2.)

6. Emission Limitation-  
Visible particulate emissions shall not exceed 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method-

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

**V. Testing Requirements (continued)**

7. Compliance with the total combined fuel oil usage limitation in A.II.1 shall be determined by the record keeping in A.III.2.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

**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:** Emergency Generator No. 1 (P001)

**Activity Description:** Diesel-fired emergency generator.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - diesel generator 1	OAC rule 3745-31-05(A)(3) (PTI 14-02713)	45.1 lbs per hour of nitrogen oxides(NOx)*; 7.12 lbs per hour of sulfur dioxide(SO2)*; 11.98 lbs per hour of carbon monoxide(CO)*; and 1.27 lbs per hour of volatile organic compounds(VOC)*.
	OAC rule 3745-31-05(D) (PTI 14-02713)	*This emission limitation is based on the emissions unit's potential to emit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this emission limitation.
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-07(A), 3745-17-11(B)(5)(b), and 3745-18-06(G).  See A.II and A.I.2.a.
	OAC rule 3745-17-11(B)(5)(b)	Visible particulate emissions shall not exceed twenty percent opacity, as a six-minute average, except as specified by rule.  Particulate emissions from this emissions unit shall not exceed 0.062 lb per million Btu of actual heat input.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-06(G)	0.5 lb SO <sub>2</sub> /mmBTU of actual heat input
	OAC rule 3745-23-06(B)	None, see section A.I.2.b below.
	OAC rule 3745-21-08(B)	None, see section A.I.2.c below.

**2. Additional Terms and Conditions**

**2.a** The total combined emissions from emissions units P001-P003 shall not exceed the following based on a rolling, 12-month summation:

- 5.18 TPY PE/PM10
- 1.33 TPY VOC
- 12.6 TPY CO
- 47.4 TPY NO<sub>x</sub>
- 7.5 TPY SO<sub>2</sub>

**2.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-02713.

**2.c** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-02713.

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. The total hours of operation for emissions units P001-P003, combined, shall not exceed 2,100 hours per year based upon a rolling, 12-month summation.
2. The quality of diesel fuel burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.50 lb SO<sub>2</sub>/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of diesel fuel.

3. The permittee shall burn only diesel fuel in this emissions unit.

**III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information on a monthly basis:
  - a. The total hours of operation for emissions units P001-P003, combined.
  - b. The rolling, 12-month summation of the hours of operation recorded pursuant to A.III.1.a (i.e., the current month's total added to the previous 11-month total).

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

2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

- a. Alternative 1:

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

- b. Alternative 2:

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

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

### IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, twelve-month operating hours limitation listed in A.II.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

## V. Testing Requirements

1. Compliance with the emission limitations specified in this permit shall be determined in accordance with the following methods:

Emission Limitation-  
7.12 lbs SO<sub>2</sub>/hour

Applicable Compliance Method-

Compliance with the lbs SO<sub>2</sub>/hr and lb/mmBTU emission limitation may be demonstrated by multiplying the emission factor of 1.01(S) lbs SO<sub>2</sub>/mmBtu, where S is the sulfur content of the diesel fuel oil (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

The sulfur content of the diesel fuel oil shall be determined by the record keeping in A.III.2.

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

2. Emission Limitation-  
45.1 lbs NO<sub>x</sub>/hour

Applicable Compliance Method-

Compliance with the lbs NO<sub>x</sub>/hr emission limitation may be demonstrated by multiplying the emission factor of 3.2 lbs NO<sub>x</sub>/mmBtu (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

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

3. Emission Limitation-  
11.98 lbs CO/hour

Applicable Compliance Method-

Compliance with the lbs CO/hr emission limitation may be demonstrated by multiplying the emission factor of 0.85 lb CO/mmBtu (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

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

4. Emission Limitation-  
1.27 lbs VOC/hour

Applicable Compliance Method-

Compliance with the lbs VOC/hr emission limitation may be demonstrated by multiplying the emission factor of 0.09 lb VOC/mmBtu (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

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

5. Emission Limitation-  
Visible emissions shall not exceed twenty percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method-

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

**V. Testing Requirements (continued)**

6. Emission Limitation-  
Particulate emissions from this emissions unit shall not exceed 0.062 lb per million Btu of actual heat input.

Applicable Compliance Method -

Compliance may be based upon an emission factor of 0.062 lb/mmBtu specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

7. Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.50 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month or each daily sample meets the limitation.

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

8. Compliance with the hours of operation limitation specified in A.II.1. shall be demonstrated by the hours of operation information collected and recorded in A.III.1.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

**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:** Emergency Generator No. 2 (P002)

**Activity Description:** Diesel-fired emergency generator.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - diesel generator 2	OAC rule 3745-31-05(A)(3) (PTI 14-02713)	45.1 lbs per hour of nitrogen oxides(NOx)*; 7.12 lbs per hour of sulfur dioxide(SO2)*; 11.98 lbs per hour of carbon monoxide(CO)*; and 1.27 lbs per hour of volatile organic compounds(VOC)*.  *This emission limitation is based on the emissions unit's potential to emit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this emission limitation.  The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-07(A), 3745-17-11(B)(5)(b), and 3745-18-06(G).  See A.II and A.I.2.a.
	OAC rule 3745-31-05(D) (PTI 14-02713)	
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed twenty percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)(5)(b)	Particulate emissions from this emissions unit shall not exceed 0.062 lb per million Btu of actual heat input.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-06(G)	0.5 lb SO <sub>2</sub> /mmBTU of actual heat input
	OAC rule 3745-23-06(B)	None, see section A.I.2.b below.
	OAC rule 3745-21-08(B)	None, see section A.I.2.c below.

**2. Additional Terms and Conditions**

**2.a** The total combined emissions from emissions units P001-P003 shall not exceed the following based on a rolling, 12-month summation:

- 5.18 TPY PE/PM10
- 1.33 TPY VOC
- 12.6 TPY CO
- 47.4 TPY NO<sub>x</sub>
- 7.5 TPY SO<sub>2</sub>

**2.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-02713.

**2.c** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-02713.

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. The total hours of operation for emissions units P001-P003, combined, shall not exceed 2,100 hours per year based upon a rolling, 12-month summation.
2. The quality of diesel fuel burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.50 lb SO<sub>2</sub>/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of diesel fuel.

3. The permittee shall burn only diesel fuel in this emissions unit.

**III. Monitoring and/or Record Keeping Requirements**

1. The permittee shall collect and record the following information on a monthly basis:
  - a. The total hours of operation for emissions units P001-P003, combined.
  - b. The rolling, 12-month summation of the hours of operation recorded pursuant to A.III.1.a (i.e., the current month's total added to the previous 11-month total).

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

2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

- a. Alternative 1:

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

- b. Alternative 2:

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

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

### IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, twelve-month operating hours limitation listed in A.II.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

## V. Testing Requirements

1. Compliance with the emission limitations specified in this permit shall be determined in accordance with the following methods:

Emission Limitation-  
7.12 lbs SO<sub>2</sub>/hour

Applicable Compliance Method-

Compliance with the lbs SO<sub>2</sub>/hr and lb/mmBTU emission limitation may be demonstrated by multiplying the emission factor of 1.01(S) lbs SO<sub>2</sub>/mmBtu, where S is the sulfur content of the diesel fuel oil (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

The sulfur content of the diesel fuel oil shall be determined by the record keeping in A.III.2.

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

2. Emission Limitation-  
45.1 lbs NO<sub>x</sub>/hour

Applicable Compliance Method-

Compliance with the lbs NO<sub>x</sub>/hr emission limitation may be demonstrated by multiplying the emission factor of 3.2 lbs NO<sub>x</sub>/mmBtu (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

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

3. Emission Limitation-  
11.98 lbs CO/hour

Applicable Compliance Method-

Compliance with the lbs CO/hr emission limitation may be demonstrated by multiplying the emission factor of 0.85 lb CO/mmBtu (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

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

4. Emission Limitation-  
1.27 lbs VOC/hour

Applicable Compliance Method-

Compliance with the lbs VOC/hr emission limitation may be demonstrated by multiplying the emission factor of 0.09 lb VOC/mmBtu (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

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

5. Emission Limitation-  
Visible emissions shall not exceed twenty percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method-

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

**V. Testing Requirements (continued)**

6. Emission Limitation-  
Particulate emissions from this emissions unit shall not exceed 0.062 lb per million Btu of actual heat input.

Applicable Compliance Method -

Compliance may be based upon an emission factor of 0.062 lb/mmBtu specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).

7. Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.50 lb/mmBtu actual heat input.

Applicable Compliance Method -

Compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month or each daily sample meets the limitation.

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

8. Compliance with the hours of operation limitation specified in A.II.1. shall be demonstrated by the hours of operation information collected and recorded in A.III.1.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

**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:** Emergency Generator No. 3 (P003)

**Activity Description:** Diesel-fired emergency generator.

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P003 - diesel generator 3	OAC rule 3745-31-05(A)(3) (PTI 14-02713)	45.1 lbs per hour of nitrogen oxides(NOx)*; 7.12 lbs per hour of sulfur dioxide(SO2)*; 11.98 lbs per hour of carbon monoxide(CO)*; and 1.27 lbs per hour of volatile organic compounds(VOC)*.
	OAC rule 3745-31-05(D) (PTI 14-02713)	*This emission limitation is based on the emissions unit's potential to emit. Therefore, no record keeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this emission limitation.
	OAC rule 3745-17-07(A)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-07(A), 3745-17-11(B)(5)(b), and 3745-18-06(G).  See A.II and A.I.2.a.
	OAC rule 3745-17-11(B)(5)(b)	Visible particulate emissions shall not exceed twenty percent opacity, as a six-minute average, except as specified by rule.  Particulate emissions from this emissions unit shall not exceed 0.062 lb per million Btu of actual heat input.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-18-06(G)	0.5 lb SO <sub>2</sub> /mmBTU of actual heat input
	OAC rule 3745-23-06(B)	None, see section A.I.2.b below.
	OAC rule 3745-21-08(B)	None, see section A.I.2.c below.

## 2. Additional Terms and Conditions

**2.a** The total combined emissions from emissions units P001-P003 shall not exceed the following based on a rolling, 12-month summation:

5.18 TPY PE/PM10  
 1.33 TPY VOC  
 12.6 TPY CO  
 47.4 TPY NO<sub>x</sub>  
 7.5 TPY SO<sub>2</sub>

**2.b** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-02713.

**2.c** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 14-02713.

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. The total hours of operation for emissions units P001-P003, combined, shall not exceed 2,100 hours per year based upon a rolling, 12-month summation.
2. The quality of diesel fuel burned in this emissions unit shall have a combination of heat and sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 0.50 lb SO<sub>2</sub>/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be determined by using analytical results provided by the permittee or oil supplier for each shipment of diesel fuel.

3. The permittee shall burn only diesel fuel in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information on a monthly basis:
  - a. The total hours of operation for emissions units P001-P003, combined.
  - b. The rolling, 12-month summation of the hours of operation recorded pursuant to A.III.1.a (i.e., the current month's total added to the previous 11-month total).

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

2. The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below.

- a. Alternative 1:

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

- b. Alternative 2:

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

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

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

### IV. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record that shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rates from Section A.III above. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than diesel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, twelve-month operating hours limitation listed in A.II.
4. The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I-General Term and Condition A.1.c.ii.

## V. Testing Requirements

1. Compliance with the emission limitations specified in this permit shall be determined in accordance with the following methods:

Emission Limitation-  
7.12 lbs SO<sub>2</sub>/hour

Applicable Compliance Method-

Compliance with the lbs SO<sub>2</sub>/hr and lb/mmBTU emission limitation may be demonstrated by multiplying the emission factor of 1.01(S) lbs SO<sub>2</sub>/mmBtu, where S is the sulfur content of the diesel fuel oil (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

The sulfur content of the diesel fuel oil shall be determined by the record keeping in A.III.2.

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

2. Emission Limitation-  
45.1 lbs NO<sub>x</sub>/hour

Applicable Compliance Method-

Compliance with the lbs NO<sub>x</sub>/hr emission limitation may be demonstrated by multiplying the emission factor of 3.2 lbs NO<sub>x</sub>/mmBtu (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

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

3. Emission Limitation-  
11.98 lbs CO/hour

Applicable Compliance Method-

Compliance with the lbs CO/hr emission limitation may be demonstrated by multiplying the emission factor of 0.85 lb CO/mmBtu (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

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

4. Emission Limitation-  
1.27 lbs VOC/hour

Applicable Compliance Method-

Compliance with the lbs VOC/hr emission limitation may be demonstrated by multiplying the emission factor of 0.09 lb VOC/mmBtu (AP-42, Fifth Edition, Section 3.4 Large Stationary Diesel Engines, Table 3.4-1, updated 10/96) by the maximum heat input of 14.1 mmBtu/hr.

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

5. Emission Limitation-  
Visible emissions shall not exceed twenty percent opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method-

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).

## **V. Testing Requirements (continued)**

6. Emission Limitation-  
Particulate emissions from this emissions unit shall not exceed 0.062 lb per million Btu of actual heat input.
- Applicable Compliance Method -  
Compliance may be based upon an emission factor of 0.062 lb/mmBtu specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.4, Table 3.4-2 (10/96).
- If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in OAC rule 3745-17-03(B)(10).
7. Emission Limitation -  
Sulfur dioxide emissions shall not exceed 0.50 lb/mmBtu actual heat input.
- Applicable Compliance Method -  
Compliance with the allowable sulfur dioxide emission limitation may be demonstrated by documenting that the sulfur content of each shipment of oil received during a calendar month or each daily sample meets the limitation.
- If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.
8. Compliance with the hours of operation limitation specified in A.II.1. shall be demonstrated by the hours of operation information collected and recorded in A.III.1.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
---	---	--

**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

\*\*\*\*\*  
**THIS IS THE LAST PAGE OF THE PERMIT**  
\*\*\*\*\*