



State of Ohio Environmental Protection Agency

Street Address:

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

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

Mailing Address:

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

08/14/03

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

08-29-70-0441  
Wright-Patterson Air Force Base  
Connie L. Strobbe  
88 ABW/EMP  
5490 Pearson Road  
Wright-Patterson AFB, OH 45433-5332

Dear Connie L. Strobbe:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by RAPCA within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled. **In order to facilitate our review of all the comments or concerns you may have with the enclosed draft permit, please provide a hand marked-up copy of the draft permit showing the changes you think are necessary, along with any additional summary comments, by the end of the draft public comment period. The hard marked-up copy and any additional summary comments should be submitted to the Ohio EPA District Office or local air agency identified below and to this office at the following address:**

**Ohio EPA, Division of Air Pollution Control  
Permit Issuance and Data Management Section  
Draft Title V Permit Correspondence  
122 South Front Street  
Columbus, Ohio 43215**

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions concerning this draft Title V permit, please contact RAPCA.

Sincerely,

  
Michael W. Ahern, Supervisor  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA (electronically submitted)  
File, DAPC PMU  
RAPCA  
Indiana  
Kentucky



State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 08/14/03	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance
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This document constitutes issuance of a Title V permit for Facility ID: 08-29-70-0441 to:  
 Wright-Patterson Air Force Base  
 88 ABW/EMP  
 5490 Pearson Road  
 Wright-Patterson AFB, OH 45433-5332

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

B113 (3003) Boiler; 16.75 MMBTU; dual fuel-fired; F/10840	B315 (2424) 66.2 MMBtu high-pressure combustion research facility; F/20018	Boiler; 18.75 MMBtu; dual fuel-fired; F/34019
B118 (5626) Boiler; 16.75 MMBtu; natural gas-fired; F/10840	B604 (2038) Boiler; 18.3 MMBTU; dual fuel-fired; F/34019	K601 (2565) Surface coating; paint spray booth; F/30093
B302 (5851) Boiler; 20.93 MMBtu; natural gas-fired ; F/20559	B605 (2040) Boiler; 18.3 MMBTU; dual fuel-fired; F/34019	K607 (5174) Surface coating; paint spray booth; F/30901
B307 (2759) Boiler (#2); 96.9 MMBTU; natual gas-fired; F/20770	B606 (2008) Boiler (#4); 176 MMBTU; coal-fired; F/31240	K608 (5093) Fuel cell facility; F/34020
B308 (2758) Boiler (#1); 96.9 MMBTU; natual gas fired; F/20770	B607 (2012) Boiler (#5); 176 MMBTU; coal-fired; F/31240	K609 (5092) Structural repair and corrosion control facility; F/34024
B309 (2030) Boiler (#4); 183 MMBTU; coal fired; F/20770	B608 (2016) Boiler (#6); 176 MMBTU; coal-fired; F/31240	K610 (5210) Aircraft maintenance and ISO facility; F/34026
B310 (2028) Boiler (#3); 183 MMBTU; coal fired; F/20770	B609 (2772) Boiler (#3); 99.8 MMBTU; natural gas-fired; F/31240	N303 (5555) Classified materials incinerator; F/20306
B311 (2033) Boiler (#5); 183 MMBTU; coal fired; F/20770	B657 (2768) Mobile boiler #4; 13.43 MMBTU; dual fuel-fired; F/30170	P310 (2547) Five jet engine test stand; F/20098
B312 (2425) Compressor air heater; natural gas, JP-4, JP-8 and kerosene -fired; F/20018C	B660 (5524)	

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:

RAPCA  
117 South Main Street  
Dayton, OH 45422-1280  
(937) 225-4435

OHIO ENVIRONMENTAL PROTECTION AGENCY

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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 may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD and Miscellaneous Metal Parts and Products surface coating, 40 CFR Part 63, SubpartMMMM. U.S. EPA failed to promulgate these standards by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002.
2. If the final NESHAP standard is not promulgated by the deadline specified by U.S. EPA, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted within 60 days after the deadline to promulgate the respective standard or by May 15, 2003, whichever is later. It must contain the following information, unless otherwise specified by future U.S. EPA regulations:
  - a. for a new affected source, the anticipated date of startup of operation;
  - b. the hazardous air pollutants (HAPs) emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
  - c. any existing federal, State, or local limitations or requirements applicable to the affected source;
  - d. for each affected emission point or group of affected emission points, an identification of control technology in place;
  - e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
  - f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.

The Part II application for a MACT determination may, but is not required to, contain the following information

- a. recommended emission limitations for the affected source and support information (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
  - b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the con
3. If the NESHAP is promulgated before the Part II application is due for the relevant source category, the permittee may be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. If subject, the permittee shall submit the following notifications:
    - a Unless otherwise specified in the relevant Subpart, within 120 days after promulgation of a 40 CFR Part 63 Subpart to which the source is subject, the permittee shall submit an Initial Notification Report that contains the following information, in accordance with 40 CFR Part 63.9(b)(2):
      - i the name and mailing address of the permittee;
      - ii. the physical location of the source if it is different from the mailing address;
      - iii. identification of the relevant MACT standard and the source's compliance date;
    - i a brief description of the nature, design, size, and method of operation of the source, and an identification of the types of emission points within the affected source subject to the relevant standard and the types of HAPs emitted; and
    - a statement confirming the facility is a major source for HAPs.

**A. State and Federally Enforcable Section (continued)**

Unless otherwise specified in the relevant Subpart, within 60 days following completion of any required compliance demonstration activity specified in the relevant Subpart, the permittee shall submit a notification of compliance status that contains the following information:

- the methods used to determine compliance;
- the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;
- ii the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
- i the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in the relevant Subpart;
- an analysis demonstrating whether the affected source is a major source or an area source;
- v a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and
- vi a statement of whether or not the permittee has complied with the requirements of the relevant Subpart.

## B. State Only Enforceable Section

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

### Area A Emissions Units

B101 600 kW Cummins emergency generator, Building 10266 (2095)  
B102 1750 kW Caterpillar emergency generator, Building 10271 (5024)  
B103 1750 kW Caterpillar emergency generator, Building 10271 (5026)  
B104 350 kW Cummins emergency generator, Building 10277 (5021)  
B105 350 kW Cummins emergency generator, Building 10277 (5022)  
B106 200 kW Cummins emergency generator, Building 10281 (5025)  
B107 5 kW Tecumseh emergency generator, Building 10291 (2100)  
B109 600 kW Cummins emergency generator, Building 10830 (2104)  
B110 600 kW Cummins emergency generator, Building 10830 (2105)  
B111 2,500 kW EMD emergency generator, Building 10840 (2102)  
B112 2,500 kW EMD emergency generator, Building 10840 (2103)  
B115 100 kW John Deere emergency generator, Building 11456 (5027)  
B116 5.23 mmBtu/hour natural gas fired boiler, Building 10849 (3001)  
B117 5.23 mmBtu/hour natural gas fired boiler, Building 10849 (5127)  
B123 5.23 mmBtu/hour natural gas fired boiler, Building 10829 (2572)  
B627 650 kW emergency generator, Building 10858 (6289)  
B641 100 kW emergency generator, Building 10851 (2106)  
B655 30 kW Hercules emergency generator, Building 10841 (2138)  
G101 Fuel dispensing, Building 10298 (5416)  
G102 Fuel dispensing, Building 10878 (3094)  
P101 Photographic developing, Building 10281 (2580)  
P102 Paper shredder, Building 10828 (2574)  
P103 Laboratory fume hood - nuclear medicine, Building 10830 (5130)  
P104 Laboratory fume hood - radionuclide hood, Building 10830 (5131)  
P105 Disintegrator, briquetter system, Building 10828 (2575)  
  
T108 25,000 gallon diesel storage tank 380, Building 10271 (3078)  
T109 25,000 gallon diesel storage tank 381, Building 10271 (3079)  
T110 6,000 gallon diesel storage tank 356, Building 10277 (5054)  
T111 1,000 gallon diesel storage tank A596, Building 10855 (3029)  
T112 25,000 gallon diesel storage tank 97, Building 10830 (3106)  
T113 25,000 gallon diesel storage tank 95, Building 10840 (3027)  
T114 25,000 gallon diesel storage tank 96, Building 10840 (3105)  
T115 4,000 gallon gasoline storage tank 237, Building 10298 (5133)  
T116 4,000 gallon gasoline storage tank 238, Building 10298 (5134)  
T117 2,000 gallon diesel storage tank A600, Building 10856 (6166)  
T118 2,000 gallon diesel storage tank, Building 10856 (6288)  
T119 1,495 gallon used motor oil storage tank A573, Building 10866 (5056)  
T120 1,000 gallon gasoline storage tank A591, Building 10878 (6174)  
T121 1,000 gallon diesel storage tank A592, Building 10878 (6175)  
T656 1,500 gallon sulfuric acid storage tank A243, Building 10262 (6153)  
Z102 1,500 gallon sulfuric acid storage tank A190, Building 10262 (5074)  
Z103 Dental lab fume hood, Building 10830 (6345)  
Z104 Dental lab fume hood, Building 10830 (6346)

**B. State Only Enforceable Section (continued)**

- Z105 Histology lab fume hood, Building 10830 (5032)
- Z106 Histopathology fume hood No. 1, Building 10830 (5497)
- Z107 Histopathology fume hood No. 2, Building 10830 (5498)
- Z108 Histopathology fume hood No. 3, Building 10830 (5499)
- Z109 Photographic chemical mixing room, Building 10829 (2570)
- Z112 Cryptology self-enclosed fume hood, Building 10830 (5033)
- Z113 Paint spray booth, Building 10867 (2577)
- Z114 Fuel dispensing, Building 10061 (5000)
- Z115 Laboratory fume hood, Building 10829 (5135)
- Z116 Graymills degreaser cold cleaner, Building 10840 (5060)
- Z117 Mycology fume hood No. 2, Building 10830 (5035)
- Z118 Oncology fume hood, Building 10830 (5036)
- Z119 Oncology fume hood with HEPA filter, Building 10830 (5061)
- Z120 Inpatient pharmacy fume hood No. 1, Building 10830 (5067)
- Z121 355 kW Caterpillar emergency generator, Building 10856 (2107)
- Z122 Dental lab fume hood, Building 10830 (6344)
- Z123 Inpatient pharmacy fume hood No. 3, Building 10830 (5069)
- Z124 Degreaser, Building 10878 (5029)
- Z125 5 offset printing presses, Building 10856 (5338)
- Z126 Maintenance woodworking, Building 10830 (5080)
- Z128 4,000 gallon diesel storage tank 364, Building 10266 (3074)
- Z129 Radiation therapy block fume hood, Building 10830 (5128)
- Z130 Mycology fume hood, Building 10830 (5034)
- Z131 Inpatient pharmacy fume hood No. 4, Building 10830 (6342)
- Z132 Chemistry lab fume hood, Building 10830 (6343)
- Z133 Groundwater air stripper No. 1, Building 10855 (5102)
- Z134 Groundwater air stripper No. 2, Building 10855 (5103)
- Z763 40 kW John Deere emergency generator, Building 11400 (5607)

**B. State Only Enforceable Section (continued)**

Area B Emissions Units

- B304 300 kW diesel fired emergency generator, Building 20557 (5319)
- B313 200 kW emergency generator, Building 20015 (2351)
- B314 125 kW emergency generator, Building 20074 (2352)
- B316 50 kW emergency generator, Building 20481 (5012)
- B320 20 kW emergency generator, Building 20620 (5363)
- B330 30 kW diesel research and development generator, Building 20622 (5868)
- B331 7.5 kW diesel research and development generator, Building 20622 (5869)
- B332 5 KW Dayton gas research and development generator, Building 20004B (5874)
- B333 5 KW Dayton gas research and development generator, Building 20004B (5875)
- B334 54 mmBtu natural gas fired research and development heater, Building 20018C (2425)
- B335 260 kW emergency generator, Building 20025C (2460)
- B336 335 kW research and development generator, Building 20071B (5352)
- B337 150 kW emergency generator, Building 20080 (2101)
- B339 275 kW emergency generator, Building 20433 (5931)
- B340 400 kW emergency generator, Building 20560 (5518)
- B341 55 kW diesel emergency generator, Building 20490 (5260)
- B342 150 kW emergency generator, Building 20620 (5939)
- B343 30 kW diesel research and development generator, Building 20622 (5868)
- B344 7.5 kW diesel research and development generator, Building 20622 (5869)
- B345 80 kW diesel emergency generator, Building 20642 (2355)
- B346 10.2 kW diesel emergency generator, Building 20745 (5450)
- B347 500 kW emergency generator, Building 20838 (5928)
- B348 19 kW gasoline generator, Building 27000 (2366)
- B349 22.5 kW emergency generator, Building 20891 (5017)
- B350 500 kW diesel emergency generator, Building 20085A (6106)
- B351 1500 kW diesel emergency generator, Building 20770 (6145)

**B. State Only Enforceable Section (continued)**

- F301 Ash handling system for heating plant, Building 20770 (5557)
- G301 Fuel dispensing, Building 20304 (5525)
- G302 Fuel dispensing AAFES, Building 20464 (5305)
- K303 Laboratory fume hood for solvent cleaning, Building 20655 (3005)
- K304 Museum paint spray booth, Building 20004D (5517)
- K305 Museum outdoor painting, Building 20004D (2532)
- K306 Museum painting in hangar, Building 20004D (5531)
- K307 Surface coating research and development, Building 20654 (6037)
- L302 Stoddard cold cleaner, Building 20004D (2223)
- L303 North end cold cleaner, Building 20021 (5519)
- L304 30 gallon solvent degreaser, Building 20261 (5924)
- L305 Solvent parts cold cleaner, Building 20618 (6148)
- P301 Abrasive cleaner, Building 20005 (2250)
- P307 Jet engine nacelle fire test simulator, Building 20071B (5354)
- P308 Bench scale lab equipment sea level jet engine test stand, Building 20071A (2476)
- P309 Groundwater air strippers, Building 20085 (2567 and 5337)
- P312 Engine lubrican testing, Building 20490 (2562)
- P313 Vented bead blaster, Building 20004D (2224)
- P314 Woodworking operation, Building 20005 (2263)
- P315 Woodworking operation, Building 20004C (2280)
- P317 Uniform preservation fume hood, Building 20005 (5513)
- P633 Hand wipe cleaning, Building 20004D (6329)
- T303 6,000 gallon used oil storage tank 365, Building 20071B (2490)
- T304 6,000 gallon used oil storage tank 366, Building 20071B (2505)
- T305 6,000 gallon used oil storage tank 367, Building 20071B (2506)
- T306 6,000 gallon used oil storage tank 368, Building 20071B (2507)
- T322 2,500 gallon diesel storage tank 385, Building 20015 (3102)
- T323 2,000 gallon fuel oil storage tank, Building 20619 (6301)
- T336 1,000 gallon diesel storage tank 386, Building 20074 (3101)
- T337 2,000 gallon diesel storage tank 026, Building 20079F (3007)
- T370 1,000 gallon diesel storage tank 222, Building 20557 (5945)

**B. State Only Enforceable Section (continued)**

- T372 1,000 gallon used oil storage tank A477, Building 20020A (5834)
- T373 2,500 gallon preservative oil storage tank, Building 20020A (5890)
- T374 1,000 gallon lubrication oil storage tank, Building 20020A (5891)
- T375 1,000 gallon lubrication oil storage tank, Building 20020A (5892)
- T376 1,000 gallon used oil storage tank A477, Building 20021 (5834)
- T377 2,000 gallon hydraulic oil storage tank A269, Building 20060 (5621)
- T378 2,000 gallon hydraulic oil storage tank A270, Building 20060 (5622)
- T379 10,000 gallon storage tank A277, Building 20079B (5597)
- T380 1,000 gallon JP-8 storage tank A199, Building 20094 (5616)
- T381 10,000 gallon gasoline storage tank 250, Building 20464 (5307)
- T382 10,000 gallon gasoline storage tank 251, Building 20464 (5308)
- T383 2,500 gallon fuel oil storage tank 118, Building 20100 (5946)
- T384 4,000 gallon JP-8 storage tank A575, Building 20098 (5848)
- T385 2,000 gallon used oil storage tank A599, Building 20201 (5849)
- T386 970 gallon sulfuric acid storage tank A123, Building 20652 (5949)
- T387 900 gallon ethanol storage tank A236, Building 20018 (5951)
- T388 970 gallon sulfuric acid storage tank A238, Building 20651 (5952)
- T390 4,000 gallon storage tank A439, Building 20025 (5968)
- T391 5,000 gallon diesel storage tank A620, Building 20770 (5969)
- T392 2,000 gallon diesel storage tank A644, Building 20085A (5972)
- T393 2,500 gallon diesel storage tank 26, Building 20079F (6118)
- Y301 650 kW diesel emergency generator, Building 20770 (2091)
- Y302 Clean room laboratory fume hood, Building 20018G (2855)
- Y303 Material evaluation equipment, Building 20490 (5318)
- Y304 Electrochemical reaction laser, Building 20620 (5364)
- Y305 Zinc-geranium phosphide fume hood, Building 20651 (5528)
- Y307 Tires/wheel testing 120 inch dynamometer, Building 20031 (5529)
- Y308 Tires/wheel testing 66 inch dynamometer, Building 20031 (5530)

**B. State Only Enforceable Section (continued)**

- Y309 Standard laboratory fume hood room 221, Building 20070 (6279)
- Y310 Standard laboratory fume hood room 221, Building 20070 (6280)
- Y311 Standard laboratory fume hood room 221, Building 20070 (6281)
- Y312 Bench scale lab equipment dual chamber reactive ion etcher, Building 20620 (2616)
- Y313 High temperature process fume hood, Building 20620 (2829)
- Y314 Laboratory fume hood room NE2-J19, Building 20620 (2830)
- Y315 Laboratory fume hood room NE2-M4, Building 20620 (2842)
- Y316 Bench scale lab equipment single chamber reactive ion etcher, Building 20620 (5324)
- Y317 Bench scale lab equipment molecular beam chamber exhaust, Building 20620 (5856)
- Y318 Bench scale lab equipment IOM implant room, Building 20620 (5857)
- Y319 Vacuum pump, Building 20620 (5859)
- Y320 Portable welding unit for fabrication of test equipment, Building 20620 (5860)
- Y321 Vacuum pump, Building 20620 (5863)
- Y322 Bench scale lab equipment plasma asher, Building 20620 (5866)
- Y323 Laboratory fume hood room 246, Building 20651 (2923)
- Y324 Laboratory fume hood room 226, Building 20651 (2926)
- Y325 Laboratory fume hood room 145, Building 20652 (2947)
- Y326 Laboratory fume hood room 302, Building 20654 (2953)
- Y327 Laboratory fume hood room 303, Building 20654 (2956)
- Y328 Laboratory fume hood room 333, Building 20654 (2965)
- Y329 Laboratory fume hood room 152, Building 20654 (5412)
- Y330 Laboratory fume hood room 301, Building 20654 (5413)
- Y331 Laboratory fume hood room 248, Building 20654 (5514)
- Y332 Laboratory fume hood room 221, Building 20654 (5515)
- Y333 Laboratory fume hood room 033, Building 20655 (2634)
- Y334 Laboratory fume hood room 183, Building 20655 (2991)
- Y335 Laboratory fume hood room 193, Building 20655 (2993)
- Y336 Laboratory fume hood room 159, Building 20655 (2995)
- Y337 Laboratory fume hood room 139, Building 20655 (2997)
- Y338 Ash handling system, Building 20770 (5557)

**B. State Only Enforceable Section (continued)**

- Y339 Laboratory fume hood room 114, Building 20824 (5551)
- Y340 Bench scale lab equipment BG line bench oven, Building 20824 (5925)
- Y341 Laboratory fume hood room 114, Building 20824 (5926)
- Y342 Laboratory fume hood room 111, Building 20824 (5927)
- Y343 Laboratory fume hood room 36, Building 20838 (5929)
- Y344 Bench scale lab equipment necropsy table, Building 20838 (5930)
- Y346 169 inch dynamometer, Building 20031 (5991)
- Y347 Gun range No. 4, Building 20063 (5977)
- Y348 Laboratory fume hood room 107W, Building 20065 (5979)
- Y349 Laboratory fume hood room 107W, Building 20065 (5980)
- Y350 Portable sand blaster, Building 20065 (5981)
- Y351 Portable sand blaster, Building 20065 (5982)
- Y352 Self-contained sand blaster, Building 20065 (5983)
- Y353 Bench scale lab equipment high temperature autoclave, Building 20065 (5986)
- Y354 Bench scale lab equipment high temperature autoclave, Building 20065 (5987)
- Y355 Gun range No. 1, Building 20100 (5978)
- Y356 Fume hood for circuit board etching, Building 20146 (5297)
- Y357 Three large heat exchangers, Building 20449 (5985)
- Y358 Self-contained bead blaster sandblasting, Building 20470 (6100)
- Y359 Class IIIB nitrogen laser, Building 20450 (6101)
- Y360 Self-contained abrasive cleaner, Building 20745 (6109)
- Y361 Laboratory fume hood room 1065, Building 20125 (6113)
- Y362 Laboratory fume hood room 1065, Building 20125 (6114)
- Y363 0.1 mmBtu/hour vertical swirl combustion rig, Building 20490 (5418)
- Y364 Bench scale lab equipment, Building 20470 (6119)
- Y365 Bench scale lab equipment, Building 20654 (6120)
- Y366 Bench scale lab equipment, Building 20655 (6121)
- Y367 Bench scale lab equipment, Building 20651 (6122)
- Y368 Laboratory fume hood room 181, Building 20651 (6123)
- Y369 Bench scale lab equipment, Building 20450 (6124)

**B. State Only Enforceable Section (continued)**

- Y370 Laboratory fume hood for research and development, Building 20022B (6125)
- Y371 Laboratory fume hood room 152, Building 20654 (6126)
- Y372 Bench scale lab equipment, Building 20652 (6127)
- Y373 Bench scale lab equipment, Building 20652 (6128)
- Y374 Bench scale lab equipment, Building 20652 (6129)
- Y375 Bench scale lab equipment, Building 20652 (6130)
- Y376 Bench scale lab equipment research and development ovens, Building 20654 (6131)
- Y377 Laboratory fume hood room 124, Building 20654 (6132)
- Y378 Bench scale lab equipment, Building 20654 (6133)
- Y379 Bench scale lab equipment, Building 20654 (6134)
- Y380 Bench scale lab equipment, Building 20654 (6135)
- Y381 Laboratory fume hood room 133, Building 20654 (6136)
- Y382 Paint gun cleaner, Building 20004D (6112)
- Y383 Self-contained sodium bicarbonate abrasive cleaner, Building 20004D (6142)
- Y384 Solvent recovery machine, Building 20004D (6141)
- Y385 Laboratory fume hood room 229B, Building 20022B (6143)
- Y386 Laboratory fume hood room 229C, Building 20022B (6144)
- Y387 Laboratory fume hood for glassware cleaning room 247, Building 20651 (2922)
- Y388 Laboratory fume hood for lens and optics cleaning room 190, Building 20651 (2930)
- Y389 Laboratory fume hood for optics cleaning room 192, Building 20651 (2931)
- Y390 Laboratory fume hood for optics and slide cleaning room 171, Building 20652 (2935)
- Y391 Laboratory fume hood for glassware cleaning room 117, Building 20652 (2949)
- Y392 Laboratory fume hood for glassware cleaning room 350, Building 20654 (2974)
- Y393 Laboratory fume hood for glassware cleaning room 326, Building 20654 (2977)
- Y394 Laboratory fume hood for glassware and instrument cleaning, Building 20654 (5390)
- Y395 Laboratory fume hood for glassware cleaning room 248, Building 20654 (5391)
- Y396 Laboratory fume hood for equipment cleaning room 150, Building 20654 (5406)

**B. State Only Enforceable Section (continued)**

- Y397 Wet repainting operation, Building 20004D (6149)
- Y398 Laboratory fume hood, Building 20470 (6150)
- Y399 Laboratory fume hood, Building 20470 (6151)
- Y400 Laboratory fume hood, Building 20070 (6283)
- Y401 Laboratory fume hood, Building 20071B (6313)
- Y402 Three inhalation chambers for toxicology research, Building 20433 (6021)
- Y403 Laboratory fume hood room 203, Building 20433 (6060)
- Y404 30 kW emergency generator, Building 20841 (6072)
- Y405 Carter PSC series printer, Building 20682 (5445)
- Y406 Silk screening of signs for USAF Museum, Building 20005 (5879)
- Y407 Self-contained sandblaster, Building 20770 (6073)
- Y408 Carter PSC series printer, Building 20682 (5443)
- Z301 Metal shop for customized parts, Building 20004A (5339)
- Z302 Plastics etching fume hood, Building 20004A (5340)
- Z303 Film developing, Building 20004A (5341)
- Z304 Self-contained sand blasting, Building 20620 (6306)
- Z305 Silk screening, Building 20004C (2279)
- Z306 Abrasive cleaner, Building 20004C (5375)
- Z307 Sandblaster (unvented), Building 20004D (5343)
- Z308 Metal shop, Building 20004D (5344)
- Z309 Vapor blast cabinet sandblasting, Building 20005 (6284)
- Z310 Solvent wash tank, Building 20005 (2242)
- Z311 Abrasive cleaning and grinding, Building 20005 (2261)
- Z312 Cold cleaner degreaser, Building 20005 (5281)
- Z313 Bench scale lab equipment, box furnace and quenching tank, Building 20021 (6350)
- Z314 Laboratory fume hood room 245, Building 20651 (2924)
- Z315 Laboratory fume hood room C114, Building 20022B (6286)
- Z316 Laboratory fume hood room 182, Building 20651 (2925)
- Z317 Laboratory fume hood room 104, Building 20070 (6259)
- Z318 10,000 gallon gasoline storage tank 249, Building 20464 (5306)
- Z319 Laboratory fume hood room 030, Building 20018 (2818)
- Z320 6.76 mmBtu/hour test rig, ramjet combustion, Building 20018C (2423)
- Z321 2,500 gallon storage tank 148, Building 20018C (5253)

**B. State Only Enforceable Section (continued)**

- Z322 Laboratory fume hood room 106, Building 20070 (6260)
- Z323 15,000 gallon fuel storage tank 156, Building 20018 (2598)
- Z324 15,000 gallon fuel storage tank 157, Building 20018 (2599)
- Z325 6,000 gallon fuel storage tank 158, Building 20018 (2600)
- Z326 6,000 gallon fuel storage tank 159, Building 20018 (2601)
- Z327 Bench scale lab equipment, Building 20070 (6010)
- Z328 12,000 gallon fuel storage tank 175, Building 20021 (2594)
- Z329 12,000 gallon fuel storage tank 176, Building 20021 (2595)
- Z330 12,000 gallon fuel storage tank 177, Building 20021 (2596)
- Z331 12,000 gallon fuel storage tank 178, Building 20021 (2597)
- Z332 20,000 gallon fuel storage tank 179, Building 20021 (2602)
- Z333 20,000 gallon fuel storage tank 180, Building 20021 (2603)
- Z334 20,000 gallon fuel storage tank 181, Building 20021 (2604)
- Z335 20,000 gallon fuel storage tank 182, Building 20021 (2605)
- Z336 20,000 gallon fuel storage tank 183, Building 20021 (2606)
- Z337 20,000 gallon fuel storage tank 184, Building 20021 (2607)
- Z338 20,000 gallon fuel storage tank 185, Building 20021 (2608)
- Z339 4,000 gallon fuel storage tank 186, Building 20021 (2609)
- Z340 Self-contained sand blaster, Building 20021 (5284)
- Z341 Self-contained sand blaster, Building 20021 (5285)
- Z342 Standard laboratory fume hood room 106, Building 20070 (6261)
- Z343 Standard laboratory fume hood room 119, Building 20070 (6262)
- Z344 Laboratory fume hood room C127, Building 20022B (2860)
- Z345 Cold cleaner, Building 20025A (5267)
- Z346 Self-contained sand blaster, Building 20025A (5286)
- Z347 260 kW diesel emergency generator, Building 20025C (2460)
- Z348 Bench scale lab equipment smoke generator, Building 20025C (5348)
- Z349 Laboratory fume hood room 119, Building 20070 (6263)
- Z350 Cold cleaner, Building 20031 (2381)
- Z351 Cold cleaner, Building 20031 (2382)

**B. State Only Enforceable Section (continued)**

- Z352 Tires/wheel testing 84 inch dynamometer, Building 20031 (5288)
- Z353 Standard laboratory fume hood, Building 20070 (6264)
- Z354 Tires/wheel testing 192 inch dynamometer, Building 20031 (5290)
- Z355 Cold cleaner, Building 20033 (2362)
- Z356 2,500 gallon hydraulic fluid storage tank 312, Building 20033 (5520)
- Z357 Maintenance woodworking, Building 20614 (2307)
- Z358 Cold cleaner, Building 20038 (2315)
- Z359 Cold cleaner, Building 20038 (2531)
- Z360 Direct-pressure blast abrasive cleaner, Building 20018 (5262)
- Z361 Cold cleaner, Building 20065 (5350)
- Z362 1,000 gallon used oil storage tank 384, Building 20070 (3090)
- Z363 Plastics and metal milling machining shop, Building 20071 (5376)
- Z364 1,000 gallon scrap fuel storage tank 170, Building 20071A (2611)
- Z365 1,000 gallon scrap fuel storage tank 171, Building 20071A (2612)
- Z366 1,000 gallon diesel storage tank A292, Building 20071B (2546)
- Z367 Canopy laboratory fume hood, Building 20018G (2816)
- Z368 6,000 gallon scrap fuel storage tank 155, Building 20071B (5351)
- Z369 335 kW diesel emergency generator, Building 20071B (5352)
- Z371 Fume hood for filling fire extinguishers with HFCs, Building 20071B (5377)
- Z372 Laboratory fume hood room 163, Building 20651 (2927)
- Z373 300 kW emergency generator, Building 20079 (2112)
- Z374 Laboratory fume hood room 221, Building 20070 (6282)
- Z375 6,000 gallon scrap fuel storage tank 151, Building 20092 (2614)
- Z376 6,000 gallon scrap fuel storage tank 152, Building 20092 (2615)
- Z377 10,000 gallon used fuel storage tank A194, Building 20094 (2540)
- Z378 4,000 gallon JP-8 storage tank A195, Building 20094 (2541)
- Z379 4,000 gallon JP-8 storage tank A196, Building 20094 (2542)
- Z380 1,000 gallon JP-8 storage tank A230, Building 20094 (2548)
- Z381 Stoddard solvent cold cleaner, Building 20094 (2619)
- Z382 Abrasive cleaner, Building 20094 (2620)

**B. State Only Enforceable Section (continued)**

- Z383 Laboratory fume hood room 205, Building 20070 (6265)
- Z384 Woodworking, Building 20146 (5296)
- Z385 Stoddard solvent cold cleaner, Building 20146 (5299)
- Z386 30 gallon non-hazardous solvent degreaser, Building 20180 (5432)
- Z388 Silica sand abrasive cleaner, Building 20197 (5434)
- Z389 Bench scale lab equipment dust erosion test fixture, Building 20255 (5300)
- Z390 10 kW gasoline generator, Building 20645 (5011)
- Z391 Laboratory fume hood, Building 20429 (5480)
- Z392 Laboratory fume hood room 209, Building 20433 (5485)
- Z393 Laboratory fume hood room 208, Building 20433 (5486)
- Z394 Laboratory fume hood room 207, Building 20433 (5487)
- Z395 Bench scale lab equipment combustion gases burn chamber, Building 20824 (5500)
- Z396 Laboratory fume hood room D116, Building 20450 (2824)
- Z397 Laboratory fume hood room B023, Building 20450 (2857)
- Z398 Laboratory fume hood room D115, Building 20450 (2863)
- Z399 Abrasive cleaner sandblasting, Building 20450 (5301)
- Z400 2,000 gallon waste oil/water storage tank 310, Building 20451 (5303)
- Z401 Laboratory fume hood room 205, Building 20070 (6266)
- Z402 Standard laboratory fume hood room 214, Building 20070 (6267)
- Z403 Paint spray booth, Building 20470 (2277)
- Z404 Woodworking, Building 20470 (2278)
- Z405 4 mmBtu/hour natural gas fired boiler, Building 20481 (2754)
- Z406 Laboratory fume hood room 162, Building 20651 (2929)
- Z407 1,000 gallon JP-8 storage tank 345, Building 20490 (2374)
- Z408 1,000 gallon JP-8 storage tank 340, Building 20490 (2375)
- Z409 25,000 gallon jet fuel storage tank 342, Building 20490 (2376)
- Z410 25,000 gallon jet fuel storage tank 343, Building 20490 (2377)
- Z411 1,000 gallon stoddard solvent storage tank 347, Building 20490 (2378)
- Z412 6,000 gallon JP-7 storage tank 352, Building 20490 (2379)
- Z413 10,000 gallon used oil/fuel storage tank 337, Building 20490 (2431)

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- Z414 1,000 gallon Jet A storage tank 338, Building 20490 (2432)
- Z415 1,000 gallon Jet A storage tank 339, Building 20490 (2433)
- Z416 25,000 gallon JP-4 storage tank 341, Building 20490 (2434)
- Z417 25,000 gallon Jet A storage tank 344, Building 20490 (2435)
- Z418 1,000 gallon VM&P naphtha storage tank 345, Building 20490 (2436)
- Z419 6,000 gallon jet fuel storage tank 348, Building 20490 (2437)
- Z420 6,000 gallon JP-8 storage tank 349, Building 20490 (2438)
- Z421 6,000 gallon JP-8 storage tank 350, Building 20490 (2439)
- Z422 6,000 gallon jet fuel storage tank 351, Building 20490 (2440)
- Z423 1,000 gallon used oil/fuel storage tank 353, Building 20490 (2441)
- Z424 Laboratory fume hood room 214, Building 20070 (6268)
- Z425 Laboratory fume hood room 227, Building 20490 (2866)
- Z426 Laboratory fume hood room 229, Building 20490 (2867)
- Z427 Laboratory fume hood room 232, Building 20490 (2868)
- Z428 Laboratory fume hood room 235, Building 20490 (2869)
- Z429 Laboratory fume hood room 235, Building 20490 (2870)
- Z430 Laboratory fume hood room 235, Building 20490 (2871)
- Z431 Laboratory fume hood room 206, Building 20490 (2872)
- Z432 Laboratory fume hood room 208, Building 20490 (2873)
- Z433 Laboratory fume hood room 134, Building 20490 (2874)
- Z434 Laboratory fume hood room 227, Building 20490 (2875)
- Z435 Laboratory fume hood room 232, Building 20490 (2876)
- Z436 Laboratory fume hood room 137, Building 20490 (2877)
- Z437 Laboratory fume hood room 133, Building 20490 (2878)
- Z438 Laboratory fume hood room 129, Building 20490 (2881)
- Z439 Canopy laboratory fume hood room 128, Building 20490 (2882)
- Z440 Laboratory fume hood room 127, Building 20490 (2883)
- Z441 Laboratory fume hood room 125, Building 20490 (2884)
- Z442 Laboratory fume hood room 124, Building 20490 (2885)
- Z443 Laboratory fume hood room 226, Building 20490 (2899)

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- Z444 Laboratory fume hood room 227, Building 20490 (2900)
- Z445 Laboratory fume hood room 231, Building 20490 (2902)
- Z446 Laboratory fume hood room 234, Building 20490 (2903)
- Z447 Laboratory fume hood room 236, Building 20490 (2904)
- Z448 Laboratory fume hood room 205, Building 20490 (2905)
- Z449 Laboratory fume hood room 207, Building 20490 (2906)
- Z450 Laboratory fume hood room 106, Building 20490 (2908)
- Z451 Laboratory fume hoodroom 122, Building 20490 (2910)
- Z452 Laboratory fume hood room 227, Building 20490 (2912)
- Z453 Laboratory fume hood and oil dump sink room 228, Building 20490 (2913)
- Z454 Laboratory fume hood room 232, Building 20490 (2914)
- Z455 Laboratory fume hood room 235, Building 20490 (2915)
- Z456 Laboratory fume hood room 236, Building 20490 (2916)
- Z457 Laboratory fume hood room 206, Building 20490 (2917)
- Z458 Laboratory fume hood and oil dump sink room 122, Building 20490 (2918)
- Z459 Laboratory fume hood room 105, Building 20490 (2919)
- Z460 Laboratory fume hood room 134, Building 20490 (2920)
- Z461 Laboratory fume hood room 137, Building 20490 (2921)
- Z462 Laboratory fume hood room 181, Building 20651 (2932)
- Z463 Self-contained sandblaster, Building 20490 (5309)
- Z464 Abrasive grinder, Building 20490 (5311)
- Z465 Abrasive cleaner, Building 20490 (5312)
- Z466 Bench scale lab equipment, Building 20490 (5316)
- Z467 Laboratory fume hood room 219, Building 20070 (6269)
- Z468 Lapping hood room NE2-J19, Building 20620 (2828)
- Z469 Laboratory fume hood room NE2-J19, Building 20620 (2831)
- Z470 Laboratory fume hood room NE2-J19, Building 20620 (2832)
- Z471 Laboratory fume hood room NE2-J19, Building 20620 (2833)
- Z472 Laboratory fume hood room NE2D19, Building 20620 (2834)
- Z473 Laboratory fume hood room NE2D19, Building 20620 (2835)
- Z474 Laboratory fume hood room NE2D19, Building 20620 (2836)

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- Z475 Laboratory fume hood room SE2-L17, Building 20620 (2838)
- Z476 Laboratory fume hood room SE2-L15, Building 20620 (2839)
- Z477 Laboratory fume hood room SE2-L15, Building 20620 (2840)
- Z478 Laboratory fume hood room NE2-J11, Building 20620 (2841)
- Z479 Laboratory fume hood room SE2-L11, Building 20620 (2845)
- Z480 Laboratory fume hood room SE2-N15, Building 20620 (2846)
- Z481 Laboratory fume hood room SE2-E24, Building 20620 (2847)
- Z482 Laboratory fume hood room SE2-C11, Building 20620 (2848)
- Z483 Laboratory fume hood room SE2-L11, Building 20620 (2849)
- Z484 Laboratory fume hood room SE2-L11, Building 20620 (2850)
- Z485 Walk-in laboratory fume hood room 219, Building 20070 (6270)
- Z486 Laboratory fume hood room SE2-L17, Building 20620 (2852)
- Z487 Laboratory fume hood room NE2D19, Building 20620 (5322)
- Z488 Plasma nitric deposition system, Building 20620 (5325)
- Z489 Plasma etching, Building 20620 (5326)
- Z490 Laboratory fume hood room 184, Building 20651 (2934)
- Z491 Laboratory fume hood room 174, Building 20651 (2936)
- Z492 Clean room laboratory fume hood room 260, Building 20651 (2938)
- Z493 Laboratory fume hood room 134F, Building 20640 (5477)
- Z494 Laboratory fume hood room 131B, Building 20640 (5478)
- Z495 Laboratory fume hood room 668, Building 20640 (5479)
- Z496 Laboratory fume hood room 261, Building 20651 (2939)
- Z497 Laboratory fume hood room 244, Building 20651 (5380)
- Z498 Laboratory fume hood room 261, Building 20651 (5381)
- Z499 Laboratory fume hood room PL100, Building 20022B (5382)
- Z500 Laboratory fume hood room G018, Building 20652 (2335)
- Z501 Laboratory fume hood room 020, Building 20652 (2349)
- Z502 Laboratory fume hood room 048, Building 20652 (2940)
- Z503 Laboratory fume hood room 039, Building 20652 (2941)

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- Z504 Laboratory fume hood room 031, Building 20652 (2942)
- Z505 Laboratory fume hood room 020, Building 20652 (2943)
- Z506 Laboratory fume hood room 219, Building 20070 (6271)
- Z507 Laboratory fume hood room 017, Building 20652 (2945)
- Z508 Laboratory fume hood room 050, Building 20652 (2946)
- Z509 Laboratory fume hood room 145, Building 20652 (2948)
- Z510 X-ray and film developing, Building 20652 (5328)
- Z511 Laboratory fume hood room 039, Building 20652 (5329)
- Z512 Laboratory fume hood room 146, Building 20652 (5383)
- Z513 Laboratory fume hood room 118, Building 20652 (5384)
- Z514 Laboratory fume hood room 118, Building 20652 (5385)
- Z515 Laboratory fume hood room 127, Building 20652 (5386)
- Z516 Laboratory fume hood room 039, Building 20652 (5387)
- Z517 Woodworking, Building 20653 (2340)
- Z518 Woodworking, Building 20653 (5430)
- Z519 Laboratory fume hood room 301, Building 20654 (2950)
- Z520 Laboratory fume hood room 301, Building 20654 (2951)
- Z521 Laboratory fume hood room 302, Building 20654 (2952)
- Z522 Laboratory fume hood room 302, Building 20654 (2954)
- Z523 Laboratory fume hood room 303, Building 20654 (2955)
- Z524 Laboratory fume hood room 303, Building 20654 (2957)
- Z525 Laboratory fume hood room 304, Building 20654 (2958)
- Z526 Laboratory fume hood room 304, Building 20654 (2959)
- Z527 Laboratory fume hood room 304, Building 20654 (2960)
- Z528 Laboratory fume hood room 334, Building 20654 (2961)
- Z529 Laboratory fume hood room 334, Building 20654 (2962)
- Z530 Laboratory fume hood room 333, Building 20654 (2963)
- Z531 Laboratory fume hood room 333, Building 20654 (2964)
- Z532 Laboratory fume hood room 332, Building 20654 (2966)
- Z533 Laboratory fume hood room 332, Building 20654 (2967)

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Z534 Laboratory fume hood room 332, Building 20654 (2968)  
Z535 Laboratory fume hood room 331, Building 20654 (2969)  
Z536 Laboratory fume hood room 331, Building 20654 (2970)  
Z537 Laboratory fume hood room 331, Building 20654 (2971)  
Z538 Laboratory fume hood room 352, Building 20654 (2972)  
Z539 Laboratory fume hood room 352, Building 20654 (2973)  
Z540 Laboratory fume hood room 323, Building 20654 (2975)  
Z541 Laboratory fume hood room 323, Building 20654 (2976)  
Z542 Laboratory fume hood room 326, Building 20654 (2978)  
Z543 Laboratory fume hood room 326, Building 20654 (2979)  
Z544 Laboratory fume hood room 325, Building 20654 (2980)  
Z545 Laboratory fume hood room 334, Building 20654 (2981)  
Z546 Laboratory fume hood room 134, Building 20654 (2982)  
Z547 Laboratory fume hood room 133, Building 20654 (2983)  
Z548 Laboratory fume hood room 132, Building 20654 (2984)  
Z549 Laboratory fume hood room 124, Building 20654 (2985)  
Z550 Laboratory fume hood room 124, Building 20654 (2986)  
Z551 Laboratory fume hood room 152, Building 20654 (2987)  
Z552 Laboratory fume hood room 250, Building 20654 (5392)  
Z553 Laboratory fume hood room 223, Building 20654 (5393)  
Z554 Laboratory fume hood room 224, Building 20654 (5394)  
Z555 Laboratory fume hood room 250, Building 20654 (5395)  
Z556 Laboratory fume hood room 223, Building 20654 (5396)  
Z557 Laboratory fume hood room 225, Building 20654 (5397)  
Z558 Laboratory fume hood room 151, Building 20654 (5398)  
Z559 Laboratory fume hood room 151, Building 20654 (5399)  
Z560 Laboratory fume hood room 101, Building 20654 (5400)  
Z561 Laboratory fume hood room 101, Building 20654 (5401)  
Z562 Laboratory fume hood room 222, Building 20654 (5402)

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- Z563 Laboratory fume hood room 251, Building 20654 (5403)
- Z564 Laboratory fume hood room 149, Building 20654 (5404)
- Z565 Standard laboratory fume hood room 220, Building 20070 (6272)
- Z566 Laboratory fume hood room 122, Building 20654 (5407)
- Z567 Laboratory fume hood room 102, Building 20654 (5408)
- Z568 Laboratory fume hood room 249, Building 20654 (5409)
- Z569 Laboratory fume hood room 325, Building 20654 (5410)
- Z570 Laboratory fume hood room 152, Building 20654 (5411)
- Z571 Laboratory fume hood room 334, Building 20654 (5414)
- Z572 Bench scale lab equipment, Building 20654 (5516)
- Z573 Laboratory fume hood room 097, Building 20655 (2389)
- Z574 Laboratory fume hood room 037, Building 20655 (2631)
- Z575 Laboratory fume hood room 035, Building 20655 (2632)
- Z576 Laboratory fume hood room 035, Building 20655 (2633)
- Z577 Laboratory fume hood room 083C/085C, Building 20655 (2635)
- Z578 Laboratory fume hood room 083C/085C, Building 20655 (2636)
- Z579 Laboratory fume hood room 083C/085C, Building 20655 (2637)
- Z580 Laboratory fume hood room 057, Building 20655 (2638)
- Z581 Laboratory fume hood room 185, Building 20655 (2988)
- Z582 Laboratory fume hood room 185, Building 20655 (2989)
- Z583 Laboratory fume hood room 183, Building 20655 (2990)
- Z584 Laboratory fume hood room 193, Building 20655 (2992)
- Z585 Laboratory fume hood room 198A, Building 20655 (2994)
- Z586 Laboratory fume hood room 048, Building 20655 (2996)
- Z587 Laboratory fume hood room 130, Building 20655 (2998)
- Z588 Laboratory fume hood room 062B, Building 20655 (5388)
- Z589 Laboratory fume hood room 128, Building 20655 (5389)
- Z590 Motion picture film cleaning, Building 20682 (5446)
- Z591 Motion picture film cleaning, Building 20682 (5447)
- Z592 Degreaser cold cleaner, Building 20745 (5451)
- Z593 Laboratory fume hood room 220, Building 20070 (6273)

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- Z594 Standard laboratory fume hood room 220, Building 20070 (6274)
- Z595 Laboratory fume hood room 220, Building 20070 (6275)
- Z596 2,000 gallon diesel storage tank A584, Building 20838 (5334)
- Z597 Laboratory fume hood room 220, Building 20070 (6276)
- Z598 Laboratory fume hood room 220, Building 20070 (6277)
- Z599 Laboratory fume hood room 221, Building 20070 (6278)
- Z600 20,000 gallon used oil storage tank 254, Building 20304 (3851)
- Z601 1,000 gallon fuel oil storage tank A586, Building 20080 (5243)
- Z721 Paint spray booth, Building 20022B (5548)
- Z723 Bench scale lab equipment fuel tank testing, Building 20065 (5549)
- Z724 Bench scale lab equipment AL test chamber, Building 20065 (5550)
- Z725 6,000 gallon used oil storage tank 259, Building 20490 (5552)
- Z727 Boiler ash/water slurry loadout, Building 20770 (5553)
- Z733 Woodworking operations, Building 20018C (5270)
- Z734 Three electric arc welders for fabrication, Building 20094 (2623)
- Z735 Laboratory fume hood, Building 20653 (5598)
- Z736 Maintenance welding, Building 20018 (5263)
- Z737 Combustion products exhaust hood, Building 20018C (5588)
- Z738 Excimer laser box, Building 20018C (5589)
- Z739 Laboratory fume hood, Building 20490 (5565)
- Z740 Ultrasonic water-based parts cleaner, Building 20490 (5566)
- Z741 Bench scale lab equipment, Building 20490 (5915)
- Z743 Aircraft fuel pump flow test stand, Building 20490 (5916)
- Z744 Ultrasonic parts cleaner, Building 20490 (5571)
- Z745 Bench scale lab equipment, Building 20490 (5581)
- Z746 Bench scale lab equipment, Building 20490 (5582)
- Z747 Bench scale lab equipment, Building 20490 (5583)
- Z748 Bench scale lab equipment, Building 20490 (5584)
- Z749 Four ball lubricant tester, Building 20490 (5585)
- Z750 Vacuum oven for heating samples, Building 20490 (5586)

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- Z751 Bench scale lab equipment, Building 20490 (5587)
- Z752 Bench scale lab equipment, Building 20490 (5570)
- Z753 Sandblaster, Building 20490 (5580)
- Z754 Exhaust hood, Building 20435 (5590)
- Z755 Laboratory canopy fume hood, Building 20018 (5591)
- Z756 Laboratory fume hood, Building 20018 (5592)
- Z757 Laboratory fume hood, Building 20018 (5593)
- Z758 Bench scale lab equipment Omega Lux lab oven, Building 20021 (6332)
- Z759 Laboratory fume hood, Building 20450 (5595)
- Z760 30 kW generator, Building 20626 (5604)
- Z764 300 kW emergency generator, Building 20558 (5608)
- Z765 300 kW emergency generator, Building 20079F (2112)
- Z772 20,000 gallon storage tank 254, Building 20201 (5612)
- Z777 Simple green parts cleaner, Building 20770 (6158)
- Z778 1,000 gallon JP-8 storage tank A198, Building 20094 (5615)
- Z779 1,000 gallon JP-8 storage tank A199, Building 20094 (5616)
- Z784 Laboratory fume hood room D09, Building 20450 (2814)
- Z785 Laboratory fume hood room D010, Building 20450 (2865)
- Z786 Laboratory fume hood room B034, Building 20450 (5943)
- Z787 Laboratory fume hood for chemical synthesis room 162, Building 20651 (5662)
- Z788 Laboratory fume hood room 163, Building 20651 (5663)
- Z789 Laboratory fume hood room 172, Building 20651 (5664)
- Z790 Laboratory fume hood room 244, Building 20651 (5665)
- Z791 Ventilation hood for gas cylinders, Building 20651 (5666)
- Z792 Ventilation hood for gas cylinders, Building 20651 (5667)
- Z793 Laboratory fume hood room 10-A, Building 20653 (5668)
- Z794 Laboratory fume hood room 322, Building 20654 (5669)
- Z795 Laboratory fume hood room 325, Building 20654 (5670)
- Z796 Laboratory fume hood room 325, Building 20654 (5671)
- Z797 Laboratory fume hood room 325, Building 20654 (5672)

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- Z798 Laboratory fume hood room 350, Building 20654 (5673)
- Z799 Laboratory fume hood room 350, Building 20654 (5674)
- Z800 Laboratory fume hood room 353, Building 20654 (5675)
- Z801 Laboratory fume hood room 354, Building 20654 (5676)
- Z802 Laboratory fume hood room 351, Building 20654 (5677)
- Z803 Laboratory fume hood room 250, Building 20654 (5678)
- Z804 Laboratory fume hood room 250, Building 20654 (5679)
- Z805 Laboratory fume hood room 249, Building 20654 (5680)
- Z806 Laboratory fume hood for solvent storage room 249, Building 20654 (5681)
- Z807 Laboratory fume hood for Blue M Oven room 249, Building 20654 (5682)
- Z808 Bench scale lab equipment vented oven, Building 20654 (5683)
- Z809 Laboratory fume hood room 252, Building 20654 (5684)
- Z810 Laboratory fume hood room 252, Building 20654 (5685)
- Z811 Laboratory fume hood room 252, Building 20654 (5686)
- Z812 Research station, Building 20654 (5687)
- Z813 Bench scale lab equipment vented oven, Building 20654 (5688)
- Z814 Laboratory fume hood room 221, Building 20654 (5689)
- Z815 Bench scale lab equipment electric oven, Building 20654 (5690)
- Z816 Bench scale lab equipment, Building 20654 (5691)
- Z817 Bench scale lab equipment, Building 20654 (5692)
- Z818 Laboratory fume hood for grinding operations room 204, Building 20654 (5693)
- Z819 Laboratory fume hood room 201, Building 20654 (5694)
- Z820 Laboratory fume hood room 122, Building 20654 (5695)
- Z821 Laboratory fume hood room 124, Building 20654 (5696)
- Z822 Laboratory fume hood room 102, Building 20654 (5697)
- Z823 Laboratory fume hood room 131, Building 20654 (5698)
- Z824 Laboratory fume hood room 131, Building 20654 (5699)
- Z825 Laboratory fume hood for Blue M Oven room 133, Building 20654 (5700)
- Z826 Laboratory fume hood room 133, Building 20654 (5701)
- Z827 Laboratory fume hood room 133A, Building 20654 (5702)

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- Z828 Laboratory fume hood room 33, Building 20654 (5703)
- Z829 Laboratory fume hood room 33, Building 20654 (5704)
- Z830 Laboratory fume hood room 33, Building 20654 (5705)
- Z831 Laboratory fume hood room 33, Building 20654 (5706)
- Z832 Laboratory fume hood room 33, Building 20654 (5707)
- Z833 Laboratory fume hood room 32, Building 20654 (5708)
- Z834 Laboratory fume hood room 32, Building 20654 (5709)
- Z835 Laboratory fume hood room 32, Building 20654 (5710)
- Z836 Laboratory fume hood room 31C, Building 20654 (5711)
- Z837 Laboratory fume hood room 48, Building 20655 (5733)
- Z838 Laboratory fume hood room 48, Building 20655 (5734)
- Z839 Laboratory fume hood room 48, Building 20655 (5735)
- Z840 Laboratory fume hood room 48, Building 20655 (5736)
- Z841 Laboratory fume hood room 193, Building 20655 (5712)
- Z842 Laboratory fume hood room 191, Building 20655 (5713)
- Z843 Laboratory fume hood room 191, Building 20655 (5714)
- Z844 Laboratory fume hood room 191, Building 20655 (5715)
- Z845 Laboratory fume hood room 188, Building 20655 (5716)
- Z846 Laboratory fume hood room 020, Building 20652 (5718)
- Z847 Laboratory fume hood room 135, Building 20652 (5719)
- Z848 Laboratory fume hood room 135, Building 20652 (5720)
- Z849 Laboratory fume hood room B019, Building 20450 (5721)
- Z850 Laboratory fume hood room B019, Building 20450 (5722)
- Z851 Laboratory fume hood room B016, Building 20450 (5723)
- Z852 Laboratory fume hood room B016, Building 20450 (5724)
- Z853 Laboratory fume hood room B016, Building 20450 (5725)
- Z854 Laboratory fume hood room B009, Building 20450 (5726)
- Z855 Laboratory fume hood room B009, Building 20450 (5727)
- Z856 Laboratory fume hood room B009, Building 20450 (5728)
- Z857 Laboratory fume hood room B010, Building 20450 (5729)
- Z858 Laboratory fume hood room D127, Building 20450 (5730)
- Z859 Bench scale lab equipment, Building 20450 (5731)

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- Z860 Laboratory fume hood room B012, Building 20450 (5732)
- Z861 Bench scale lab equipment, Building 20450 (5737)
- Z862 Bench scale lab equipment, Building 20450 (5738)
- Z863 Bench scale lab equipment, Building 20450 (5739)
- Z864 Bench scale lab equipment, Building 20450 (5740)
- Z865 Bench scale lab equipment, Building 20450 (5741)
- Z866 Bench scale lab equipment, Building 20450 (5742)
- Z867 Bench scale lab equipment, Building 20450 (5743)
- Z868 Laboratory fume hood room E101, Building 20450 (5744)
- Z869 Laboratory fume hood room E132, Building 20450 (5745)
- Z870 Laboratory fume hood room E132, Building 20450 (5746)
- Z871 Exhaust system for bench scale lab equipment, Building 20071A (5747)
- Z872 Exhaust system for bench scale research and development, Building 20071A (5748)
- Z873 Toxicology research laboratory fume hood room 121, Building 20079 (5636)
- Z874 Toxicology research laboratory fume hood room 122, Building 20079 (5637)
- Z875 Toxicology research laboratory fume hood room 122, Building 20079 (5638)
- Z876 Toxicology research laboratory fume hood room 122, Building 20079 (5639)
- Z877 Toxicology research laboratory fume hood room 127, Building 20079 (5640)
- Z878 Toxicology research laboratory fume hood room 127, Building 20079 (5641)
- Z879 Toxicology research laboratory fume hood room 129, Building 20079 (5642)
- Z880 Toxicology research laboratory fume hood room 179, Building 20079 (5643)
- Z881 Toxicology research laboratory fume hood room 180, Building 20079 (5644)
- Z882 Toxicology research laboratory fume hood room 178, Building 20079 (5645)
- Z883 Toxicology research laboratory fume hood room 184, Building 20079 (5646)
- Z884 Toxicology research laboratory fume hood room 175, Building 20079 (5647)
- Z885 Toxicology research laboratory fume hood room 170, Building 20079 (5648)
- Z886 Toxicology research laboratory fume hood room 193A, Building 20079 (5649)

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- Z887 Toxicology research laboratory fume hood room 171, Building 20079 (5650)
- Z888 Toxicology research laboratory fume hood room 172, Building 20079 (5651)
- Z889 Toxicology research laboratory fume hood room 161, Building 20079 (5652)
- Z890 Toxicology research laboratory fume hood room 149, Building 20079 (5653)
- Z891 Toxicology research laboratory fume hood room 159, Building 20079 (5654)
- Z892 Research tables, Building 20079 (5655)
- Z893 Toxicology research laboratory fume hood room 153, Building 20079 (5656)
- Z894 Two animal isolation chambers, Building 20079 (5657)
- Z895 Toxicology research laboratory fume hood room 153, Building 20079 (5658)
- Z896 Vent in chemical storage area, Building 20079 (5749)
- Z897 Scrubber for exposure chamber, Building 20079 (5659)
- Z898 Scrubber for exposure chamber, Building 20079 (5660)
- Z899 Scrubber for exposure chamber, Building 20079 (5661)
- Z900 Scrubber for exposure chamber, Building 20079 (5750)
- Z901 Emergency ventilation system, Building 20079 (5751)
- Z902 GC and other lab equipment, Building 20079 (5752)
- Z903 GC and other lab equipment, Building 20079 (5753)
- Z904 Toxicology research laboratory fume hood room 02, Building 20079 (5754)
- Z905 Laboratory fume hood room 170B, Building 20079 (5755)
- Z906 Laboratory fume hood room 124, Building 20640 (5852)
- Z907 Laboratory fume hood room 124, Building 20640 (5853)
- Z910 Welding fabrication for research and development, Building 20004B (5873)
- Z911 Laboratory fume hood room 30A, Building 20018 (2819)
- Z912 Canopy fume hood room 30, Building 20018 (2827)
- Z913 Canopy fume hood room 30A, Building 20018 (5346)
- Z914 Low point exhaust, Building 20018 (5904)
- Z915 Canopy fume hood room 30, Building 20018 (5905)
- Z916 Oven for research and development, Building 20018 (5906)
- Z917 Oven for research and development, Building 20018 (5907)

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- Z918 Tenney oven and environmental test chamber, Building 20018 (5908)
- Z919 Fuel stand, Building 20018C (5909)
- Z920 1.2 mmBtu/hour scramjet, Building 20018C (5271)
- Z921 Fuel stand, Building 20018C (5909)
- Z922 Arc welder with 130 kW gasoline generator, Building 20018E (5283)
- Z923 Canopy fume hood room 044, Building 20018G (2816)
- Z924 Laboratory fume hood, Building 20018G (2820)
- Z925 Laboratory fume hood room 32, Building 20018 (2853)
- Z926 Laboratory fume hood, Building 20018G (2854)
- Z927 Welding fabrication for research and development, Building 20021 (5266)
- Z928 Bench scale lab equipment, gravity convection, Building 20021 (5887)
- Z929 Bench scale lab equipment, oven for heating bearings, Building 20021 (5888)
- Z930 Bench scale lab equipment blue oven, Building 20021 (5889)
- Z931 Laboratory fume hood room B128, Building 20022B (2861)
- Z932 Argon fluoride laser for research and development, Building 20024C (5596)
- Z933 Laboratory fume hood, Building 20033 (5938)
- Z934 Bench scale lab equipment wind tunnel, Building 20024C (5538)
- Z935 Advanced turbine aerothermal research facility, Building 20071B (5356)
- Z936 Laboratory fume hood, Building 20071B (5601)
- Z937 Canopy laboratory fume hood, Building 20071B (5602)
- Z938 Canopy laboratory fume hood, Building 20071B (5603)
- Z939 Large blue oven for research and development, Building 20071B (5893)
- Z940 LOX heat transfer augmentation and chemical storage area, Building 20071B (5894)
- Z941 Tube furnace, Building 20071B (5895)
- Z942 Oven for delaminating materials, Building 20071B (5896)
- Z943 Oven for research and development, Building 20071B (5897)
- Z944 Laboratory fume hood room 218, Building 20435 (5378)
- Z945 Laboratory fume hood, Building 20079A (5481)
- Z946 Laboratory fume hood, Building 20196 (5476)
- Z947 Laboratory fume hood, Building 20248 (5937)
- Z948 Oven for research and development, Building 20252 (5898)

**B. State Only Enforceable Section (continued)**

- Z949 Canopy fume hoods, Building 20252 (5899)
- Z950 Research and development shaker room with exhaust, Building 20252 (5900)
- Z951 Bench scale lab equipment oven for bearings on propellers, Building 20252 (5901)
- Z952 Bench scale lab equipment, Building 20252 (5902)
- Z953 Bench scale lab equipment oven for bearings, Building 20252 (5903)
- Z954 Laboratory fume hood room 106, Building 20433 (5932)
- Z955 Laboratory fume hood room 105, Building 20433 (5933)
- Z956 Laboratory fume hood room 120, Building 20433 (5934)
- Z957 Laboratory fume hood room 120, Building 20433 (5935)
- Z958 Laboratory fume hood room 209, Building 20433 (5936)
- Z959 Laboratory fume hood room E010, Building 20450 (5910)
- Z960 Laboratory fume hood room D127, Building 20450 (2822)
- Z961 Laboratory fume hood room D127, Building 20450 (2823)
- Z962 Vent drop for bench scale lab equipment, Building 20450 (2825)
- Z963 Canopy fume hood with 1.0 mmBtu/hour combustion rig, Building 20450 (5358)
- Z964 Canopy fume hood with 1.0 mmBtu/hour combustion rig, Building 20450 (5359)
- Z965 Canopy fume hood with 1.0 mmBtu/hour combustion rig, Building 20450 (5360)
- Z966 Canopy fume hood with 1.0 mmBtu/hour combustion rig, Building 20450 (5361)
- Z967 Laboratory fume hood room 105, Building 20450 (2909)
- Z968 Bench scale lab equipment, Building 20450 (5940)
- Z969 Bench scale lab equipment, Building 20450 (5941)
- Z971 Laboratory fume hood room 132, Building 20490 (2879)
- Z972 Laboratory fume hood room 131, Building 20490 (2880)
- Z973 Laboratory fume hood room 222, Building 20490 (2886)
- Z974 Canopy laboratory fume hood room 130, Building 20490 (2887)
- Z975 Laboratory fume hood room 227, Building 20490 (2888)
- Z976 Laboratory fume hood room 231, Building 20490 (2889)
- Z977 Laboratory fume hood room 233, Building 20490 (2890)
- Z978 Laboratory fume hood room 235, Building 20490 (2891)
  
- Z979 Laboratory fume hood room 108, Building 20490 (2892)
- Z980 Laboratory fume hood room 107, Building 20490 (2893)
- Z981 Laboratory fume hood room 136, Building 20490 (2894)
- Z982 Laboratory fume hood room 148, Building 20490 (2895)
- Z983 Laboratory fume hood room 135, Building 20490 (2896)
- Z984 Laboratory fume hood room 126, Building 20490 (2897)
- Z985 Laboratory fume hood room 222, Building 20490 (2898)
- Z986 Laboratory fume hood room 228, Building 20490 (2901)
- Z987 Laboratory fume hood room 137, Building 20490 (2907)
- Z988 Laboratory fume hood room 222, Building 20490 (2911)
- Z989 Canopy fume hood with 0.175 mmBtu/hour combustion rig, Building 20490 (5258)
- Z990 Canopy fume hood with 0.175 mmBtu/hour well-stirred reactor, Building 20490 (5259)
- Z991 Canopy fume hood with 0.185 mmBtu/hour combustion rig, Building 20490 (5419)
- Z992 Bench scale lab equipment multiphase carbon determinator, Building 20490 (5911)
- Z993 Bench scale lab equipment multiphase carbon determinator, Building 20490 (5912)
- Z994 Bench scale lab equipment endothermic cracking test, Building 20490 (5913)
- Z995 Bench scale lab equipment vacuum oven, Building 20490 (5914)
- Z996 Fuel dispensing room, Building 20490 (5917)
- Z997 Bench scale lab equipment fuel thermal stability rig, Building 20490 (5918)
- Z998 Bench scale lab equipment Edtest fuel thermal stability room, Building 20490 (5919)
- Z999 Bench scale lab equipment oven, Building 20490 (5920)

**B. State Only Enforceable Section (continued)**

Area C Emissions Units

- B603 60 kW emergency generator, Building 30168 (2124)
- B610 60 kW portable John Deere generator, Building 30017 (5013)
- B611 6.0 kW portable gas generator, Building 30013 (6294)
- B612 60 kW portable John Deere generator, Building 30017 (5015)
- B617 4 kW portable gas generator, Building 30017 (5214)
- B618 5 kW portable Vermont generator, Building 30017 (5216)
- B619 5 kW portable Libby Welding generator, Building 30017 (5217)
- B620 5 kW portable Freemont generator, Building 30017 (5218)
- B621 85 kW portable Perkins generator, Building 30017 (5221)
- B622 85 kW portable Perkins generator, Building 30017 (5222)
  
- B623 200 kW portable Cummins generator, Building 30017 (5224)
- B628 Diesel powered portable arc and TIG welders, Building 30060 (5168)
- B629 150 kW emergency generator, Building 30110 (5010)
- B630 400 kW emergency generator, Building 30117 (2354)
- B631 100 kW emergency generator, Building 30142 (5094)
- B632 900 kW emergency generator, Building 30143 (2119)
- B635 150 kW emergency generator, Building 30170 (5001)
- B639 150 kW emergency generator, Building 30206 (2042)
- B642 33 kW emergency generator, Building 30950 (2126)
- B643 95 kW emergency generator, Building 30962 (5097)
- B645 50 kW emergency generator, Building 34010 (5101)
- B646 20 kW emergency generator, Building 34024 (2135)
- B648 125 kW emergency generator, Building 34041 (5096)
- B649 180 kW emergency generator, Building 34052 (5051)
- B650 Heater for pool at Jarvis gym, Building 31246 (6311)
- B653 5.5 kW portable gas generator, Building 30013 (5205)
- B654 5.5 kW portable gas generator, Building 30013 (5206)
- B661 250 kW emergency generator, Building 30149 (2120)
- B662 200 kW emergency generator, Building 30017 (6335)
- G304 Fuel dispensing facility AGE equipment, Building 30093 (2464)
- G601 Gasoline dispensing facility Area C military station, Building 30060 (5521)
- G603 AAFES gasoline dispensing facility, Building 30119 (5241)
- G605 Fuel dispensing facility, Building 34021 (2269)
- G607 Fuel dispensing facility, Building 30153 (6115)
- J601 Aircraft fuel loading rack, Building 30143 (2801)
- J602 JP-8 bulk fuel loading rack, Building 30154 (2298)
- J603 Aircraft fuel loading rack, Building 34032 (5020)

**B. State Only Enforceable Section (continued)**

- K611 Paint spray booth, Building 30022 (5504)
- K612 Rustproof coating application, Building 30060 (2204)
- K613 Surface coating, Building 31244 (2319)
- K614 Surface coating, touch-up painting, (6303)
- K615 Surface coating, touch-up painting, Building 30145 (6331)
- K616 Surface coating, touch-up painting, Building 34045 (5093)
- P318 Landfill 8/10 methane gas extraction, Building LF 8/10 (5556)
- P601 Sandblaster, Building 30013 (2056)
- P604 Plasma cutter, Building 34026 (5542)
- P605 Maintenance woodworking, Building 30022 (2072)
- P609 Groundwater air strippers, Building 30172 (3098)
- P610 Air stripper for groundwater remediation, Building 30880 (3100)
- P611 Fire and rescue training, Building 34090 (2642)
- P612 Woodworking shop skills development center, Building 30095 (2318)
- P613 Foam-in place packaging, Building 30143 (2578)
- P614 Woodworking operation, Building 30143 (2579)
- P615 Hand-wipe cleaning flightline 445 AGS/LGGA (6317)
- P616 Hand-wipe cleaning flightline 445 MS/LGMFC (6063)
- P617 Hand-wipe cleaning, Building 30105 (6318)
- P618 Hand-wipe cleaning, Building 34012 (6064)
- P619 Hand-wipe cleaning, Building 34020 (6319)
- P620 Hand-wipe cleaning, Building 34021 (6320)
- P621 Hand-wipe cleaning 445 MS/LGMFC, Building 34022 (6065)
- P622 Hand-wipe cleaning 445 AGS/LGGA, Building 34022 (6321)
- P623 Hand-wipe cleaning, Building 34024 (6322)
- P624 Hand-wipe cleaning 445 MS/LGMFC, Building 34026 (6066)
- P625 Hand-wipe cleaning 445 MS/LGMFC, Building 34026 (6323)
- P626 Hand-wipe cleaning 445 MS/LGMSA, Building 34026 (6067)
- P627 Hand-wipe cleaning 445 MS/LGMSD, Building 34026 (6324)
- P628 Hand-wipe cleaning 445 MS/LGMSD, Building 34026 (6068)

**B. State Only Enforceable Section (continued)**

- P629 Hand-wipe cleaning 445 AGS/LGGB, Building 34028 (6325)
- P630 Hand-wipe cleaning 445 MS/LGMFC, Building 34028 (6326)
- P631 Hand-wipe cleaning, Building 34046 (6327)
- P632 Hand-wipe cleaning, Building 30145 (6328)
- T601 1,000 gallon fuel oil storage tank A621, Building 31229 (6215)
- T612 2,000 gallon waste hydraulic oil storage tank 361, Building 30094 (2807)
- T615 750 gallon muriatic acid storage tank A122, Building 30019 (6243)
- T616 2,000 gallon waste oil storage tank 58, Building 30093 (2492)
- T617 1,000 gallon AFFF storage tank A647, Building 30148 (6192)
- T618 6,000 gallon used oil storage tank 188, Building 30151 (6193)
- T624 420,000 gallon JP-8 storage tank A252, Building 30154 (2522)
- T625 420,000 gallon JP-8 storage tank A255, Building 30154 (2508)
- T626 420,000 gallon JP-8 storage tank A254, Building 30154 (2305)
- T627 420,000 gallon JP-8 storage tank A249, Building 30154 (2294)
- T628 420,000 gallon JP-8 storage tank A251, Building 30154 (2293)
- T629 420,000 gallon JP-8 storage tank A250, Building 30154 (2509)
- T630 420,000 gallon JP-8 storage tank A256, Building 30154 (2524)
- T631 15,000 gallon Mogas storage tank A310, Building 30154 (2297)
- T632 840,000 gallon JP-8 storage tank A271, Building 30154 (2295)
- T633 210,000 gallon DL-2 storage tank A272, Building 30154 (2296)
- T634 2,000 gallon diesel storage tank 187, Building 30149 (6307)
- T635 420,000 gallon JP-8 storage tank A258, Building 30154 (2527)
- T636 420,000 gallon JP-8 storage tank A253, Building 30154 (2803)
- T637 420,000 gallon JP-8 storage tank A257, Building 30154 (2526)
- T639 1,000 gallon diesel storage tank 383, Building 30168 (3081)
- T640 3,000 gallon sulfuric acid storage tank A639, Building 30170 (5123)
- T649 1,000 gallon diesel storage tank A581, Building 30884 (5175)
- T657 1,000 gallon fuel fuel oil storage tank 091, Building 31229 (3026)

**B. State Only Enforceable Section (continued)**

- T661 30,000 gallon fuel oil storage tank 296, Building 34019 (2504)
- T662 30,000 gallon fuel oil storage tank 297, Building 34019 (2172)
- T663 50,000 gallon JP-8 storage tank 283, Building 34032 (2516)
- T664 50,000 gallon JP-8 storage tank 275, Building 34030 (2514)
- T665 50,000 gallon JP-8 storage tank 276, Building 34030 (2515)
- T666 1,000 gallon mobile storage tank, Building 30170 (6056)
- T667 50,000 gallon JP-8 storage tank 274, Building 34030 (2513)
- T668 50,000 gallon JP-8 storage tank 273, Building 34030 (2299)
- T669 50,000 gallon JP-8 storage tank 284, Building 34032 (2517)
- T670 50,000 gallon JP-8 storage tank 285, Building 34032 (2518)
- T671 50,000 gallon JP-8 storage tank 286, Building 34032 (2519)
- T673 1,000 gallon mobile storage tank, Building 30170 (6057)
- T675 1,000 gallon diesel storage tank 382, Building 34041 (3080)
- T676 20,000 gallon gasoline storage tank 325, Building 30060 (5522)
- T677 20,000 gallon diesel storage tank 326, Building 30060 (5523)
- T682 2,500 gallon JP-8 storage tank 376, Building 30093 (2465)
- T683 2,500 gallon JP-8 storage tank 377, Building 30093 (2466)
- T684 15,000 gallon used fuel storage tank 260, Building 30256 (5240)
- T685 1,000 gallon mobile storage tank, Building 30170 (6058)
- T686 15,000 gallon AVGAS storage tank, Building 30153 (6071)
- Y345 OU8 bioslurper, Building OU8 (5558)
- Y600 Aircraft touch-up painting, Building 34022 (6302)
- Y601 Aircraft touch-up painting, building 34028 (6303)
- Y602 Paint gun cleaner, Building 30105 (6330)
- Z602 4,000 gallon fuel oil storage tank 357, Building 34066 (5512)
- Z603 Safety-Kleen cold cleaner, Building 34028 (6299)
- Z604 Degreaser cold cleaner, Building 31244 (5090)
- Z605 Direct pressure blast abrasive cleaner, Building 34024 (2534)
- Z606 Firing range bullet trap, Building 30886 (5944)
- Z607 Abrasive cleaner, Building 34024 (5089)
- Z608 Hydraulic shop cold cleaner, Building 34026 (5184)

**B. State Only Enforceable Section (continued)**

- Z609 Wheel and tire shop cold cleaner, Building 34026 (5186)
- Z610 Machine shop cold cleaner, Building 34026 (5187)
- Z611 Cold cleaner, Building 30013 (5202)
- Z612 Degreaser cold cleaner, Building 30017 (2082)
- Z614 5,000 gallon storage tank A117, Building 34012 (6228)
- Z616 1,000 gallon storage tank 372, Building 34021 (2270)
- Z617 1,000 gallon storage tank 371, Building 34021 (2271)
- Z618 1,000 gallon storage tank 373, Building 34021 (2272)
- Z619 1,500 gallon storage tank 7, Building 34024 (6232)
- Z620 Detergent washrack for AGE, Building 30152 (6254)
- Z624 Kodak M60 industrial film processor, Building 30013 (5420)
- Z625 Silk screening, Building 30095 (6241)
- Z626 Maintenance MIG welding, Building 30060 (5169)
- Z627 8,000 gallon storage tank A601, Building 31240 (6009)
- Z628 5,000 gallon diesel storage tank A603, Building 30143 (6190)
- Z629 HVLP gun cleaner, Building 30093 (5546)
- Z630 Sanding operation - washrack area, Building 30093 (5547)
- Z631 Safety-Kleen cold cleaner, Building 34021 (2536)
- Z632 5,000 gallon storage tank A118, Building 34012 (6229)
- Z633 Metal shop, Building 30022 (2077)
- Z634 Safety-Kleen cold cleaner, Building 30060 (2205)
- Z635 1,000 gallon diesel storage tank 332, Building 30110 (5422)
- Z636 1,000 gallon diesel storage tank 375, Building 30117 (3076)
- Z637 Safety-Kleen cold cleaner, Building 30060 (5539)
- Z638 Safety-Kleen cold cleaner, Building 30060 (5540)
- Z639 1,000 gallon hydrazine storage tank 379, Building 30136 (2497)
- Z640 1,100 gallon storage tank A294, Building 30268 (6203)
- Z641 1,000 gallon diesel storage tank A033, Building 30142 (5473)
- Z642 Degreaser, Building 30145 (5176)
- Z643 Cold cleaner, Building 30151 (2207)
- Z644 Degreaser, Building 30153 (5125)

**B. State Only Enforceable Section (continued)**

- Z645 25,000 gallon storage tank A583, Building 30154 (5005)
- Z646 25,000 gallon storage tank A582, Building 30154 (5006)
- Z647 6.7 mmBtu/hour boiler, Building 30170 (2186)
- Z648 6.7 mmBtu/hour boiler, Building 30170 (2188)
- Z650 1,000 gallon diesel storage tank A037, Building 30170 (5192)
- Z651 2,000 gallon storage tank A622, Building 30256 (6202)
- Z652 3 kW diesel fired hand held generator, Building 30881 (5153)
- Z653 3 kW diesel fired hand held generator, Building 30881 (5154)
- Z654 3 kW diesel fired hand held generator, Building 30881 (5155)
- Z655 3 kW diesel fired hand held generator, Building 30881 (5156)
- Z656 3 kW diesel fired hand held generator, Building 30881 (5157)
- Z657 3 kW diesel fired hand held generator, Building 30881 (5158)
- Z658 30 gallon degreaser, Building 30894 (5188)
- Z659 Cold cleaner degreaser, Building 30901 (5203)
- Z660 Safety-Kleen cold cleaner, Building 30901 (5204)
- Z661 30 kW emergency generator, Building 30964 (2129)
- Z662 20 kW emergency generator, Building 30967 (2130)
- Z663 20 kW emergency generator, Building 30971 (2131)
- Z665 750 kW emergency generator, Building 31240 (2061)
- Z666 Solvent cold cleaner, Building 31240 (2063)
- Z668 750 kW emergency generator, Building 31240 (5164)
- Z669 Cold cleaner, Building 31240 (5201)
- Z670 75 kW emergency generator, Building 34012 (2134)
- Z671 Safety Kleen cold cleaner, Building 34026 (6269)
- Z672 Direct pressure blast abrasive cleaner, Building 30058 (2206)
- Z673 Laboratory fume hood, Building 30070 (5510)
- Z674 Abrasive cleaner suction blast, Building 30170 (2079)
- Z675 Portable wash rack for aircraft, Building 34024 (2285)
- Z676 Safety Kleen paint gun cleaner, Building 34024 (6295)
- Z677 125 kW diesel emergency generator, Building 34029 (2044)

**B. State Only Enforceable Section (continued)**

- Z678 1,000 gallon diesel storage tank 243, Building 34052 (5503)
- Z679 6,000 gallon fuel oil storage tank 358, Building 34067 (5230)
- Z680 Self-contained abrasive cleaner, Building 31244 (6041)
- Z681 6.7 mmBtu natural gas fired boiler #3, Building 30170 (2189)
- Z682 0.64 mmBtu/hour diesel boiler, Building 30059 (5117)
- Z683 2.45 mmBtu/hour diesel boiler, Building 30884 (2175)
- Z684 0.45 mmBtu/hour diesel boiler, Building 34066 (2177)
- Z685 3.35 mmBtu/hour diesel boiler, Building 34067 (2773)
- Z686 Self-contained abrasive cleaner, Building 30070 (6069)
- Z696 750 kW diesel emergency generator, Building 30207 (5532)
- Z703 West ramp hydrant system, Building 34032 (5232)
- Z704 150 kW emergency generator, Building 30154 (2121)
- Z705 Diesel fuel loading rack, Building 30154 (2313)
- Z706 Gasoline fuel loading rack, Building 30154 (2314)
- Z708 Paint spray booth, Building 30013 (2046)
- Z709 10,000 gallon storage tank 270, Building 30119 (5423)
- Z710 10,000 gallon storage tank 271, Building 30119 (5424)
- Z711 10,000 gallon storage tank 272, Building 30119 (5425)
- Z718 HVAC descaling process, Building 30019 (5182)
- Z719 Ash handling system, Building 31240 (5545)
- Z728 Boiler ash/water slurry loadout, Building 31240 (5554)
- Z730 1,000 gallon Mogas storage tank 378, Building 30093 (3077)
- Z731 1,200 gallon AFFF storage tank A211, Building 34020 (5561)
- Z732 1,200 gallon AFFF storage tank A210, Building 34022 (5562)
- Z742 Aircraft stenciling, Building 34028 (5560)
- Z761 750 kW emergency generator, Building 30054 (5605)
- Z762 750 kW emergency generator, Building 31240 (5606)
- Z767 150 kW emergency generator, Building 30018 (5611)
- Z768 4 kW portable gasoline generator, Building 30017 (5215)
- Z769 2,000 gallon storage tank 307, Building 34030 (3059)

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

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

**Emissions Unit ID:** 3003 (B113)

**Activity Description:** Boiler; 16.75 MMBTU; dual fuel-fired; F/10840

#### 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>
16.75 mmBtu/hour natural gas boiler with No. 1 fuel oil backup; Building 10840 (3003)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule
	NSPS 40 CFR Part 60, Subpart Dc	See A.II.1., A.III.1., A.III.2., and A.IV.1.
	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) PTI 08-1984	0.335 lb/hour and 1.47 TPY particulate emissions (PE);  2.4 lbs/hour and 10.5 TPY nitrogen oxides (NOx);  8.48 lbs/hour and 3.80 TPY sulfur dioxides (SO <sub>2</sub> );  1.41 lbs/hour and 6.18 TPY carbon monoxide (CO);  0.10 lb/hour and 0.40 TPY organic compounds (OC)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B), 3745-17-07(A), 3745-23-06(B), 3745-31-05(D) and 3745-21-08(B) and 40 CFR, Part 60, Subpart Dc.

**2. Additional Terms and Conditions**

- 2.a** The hourly limitations were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-1984.

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 permittee shall burn only natural gas and/or number one fuel oil in this emissions unit.
2. The maximum annual fuel oil usage for this emissions unit shall not exceed 104,682 gallons.
3. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
4. The quality of the no. 1 fuel oil burned in this emissions unit shall have a sulfur content that is sufficient to comply with the allowable SO<sub>2</sub> emission limitation specified in Section A.I above.

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

1. For each shipment of oil received for burning in this emissions unit, the permittee shall 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 and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. 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 method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.

2. The permittee shall calculate and maintain monthly records of the following information for this emissions unit:
  - a. the quantity of natural gas (in mm cu ft) and fuel oil (in gallons) burned;
  - b. the SO<sub>2</sub> emissions, in tons, calculated as follows:
    - i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu ft, as specified in AP-42 Chapter 1.4-2 (7/98);
    - ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 71 lbs SO<sub>2</sub>/1000 gallons, as specified in AP-42 Chapter 1.3-1 (9/98); and
    - iii. sum (i) and (ii), and divide by 2,000.
3. For each day during which the permittee burns a fuel other than natural gas and/or number one fuel 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 submit quarterly reports of the fuel supplier certification to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the following:
  - a. the name of the supplier; and
  - b. a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c which states that distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils".
  - c. if no fuel oil is burned in this emissions unit during the calendar quarter, a statement to that effect shall be submitted.

These reports shall be submitted by January 31, April 30, July 31, and October 31 and shall cover the previous three calendar months.

2. The permittee shall submit annual reports that summarize the actual annual fuel oil usage for the previous calendar year for this emissions unit. These reports shall be submitted by January 31 of each year.
3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number one fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

**1.** Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

**1.a** Emission Limitation -  
0.020 pound of PE per mmBtu actual heat input

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

When burning number one fuel oil, compliance may be determined by multiplying the maximum hourly fuel oil burning capacity of the emissions unit (gallons/hour) by the emission factor of 2 lbs PE/1000 gallons, from AP-42, Chapter 1.3-1 (revised 9/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).

**1.b** Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

**1.c** Emission Limitation -  
fuel oil sulfur content of 0.5% by weight

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit.

**1.d** Emission Limitation -  
0.335 lb/hour PE

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (1.9 lbs PE/mm cu ft) as specified in AP-42 Chapter 1.4-2 (7/98), by the maximum hourly gas burning capacity (0.01675 mm cu ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (2 lbs PE/1000 gallons) as specified in AP-42 Chapter 1.3-1 (9/98), by the maximum hourly fuel burning capacity (119.6 gallons/hour) of the emissions unit.

If required, compliance with the limitation above shall be demonstrated in accordance with Methods 1 - 5 of 40 CFR, APart 60, Appendix A.

Emission Limitation -  
1.47 TPY PE

Applicable Compliance Method -

The annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall be ensured.

**V. Testing Requirements (continued)**

**1.e** Emission Limitation -  
2.4 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (100 lbs NO<sub>x</sub>/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (20 lbs NO<sub>x</sub>/1000 gallons), from AP-42, Chapter 1.3-1 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable NO<sub>x</sub> emission limitation in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
10.5 TPY NO<sub>x</sub>

Applicable Compliance Method -

The annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall be ensured.

**1.f** Emission Limitation -  
8.48 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (0.6 lb SO<sub>2</sub>/mm cu. ft), from AP-42, Chapter 1.4-2 (revised 7/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (71 lbs SO<sub>2</sub>/1000 gallons), from AP-42, Chapter 1.3-1 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable SO<sub>2</sub> emission limitation in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
3.80 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in section A.III of this permit.

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

**1.g** Emission Limitation -  
1.41 lb/hour CO

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (84 lbs CO/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (5 lbs CO/1000 gallons), from AP-42, Chapter 1.3-1 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

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

Emission Limitation -  
6.18 TPY CO

Applicable Compliance Method -

The annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall be ensured.

**1.h** Emission Limitation -  
0.10 lb/hour OC

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (5.5 lbs OC/mm cu ft), from AP-42, Chapter 1.4-2 (revised 7/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (0.556 lb OC/1000 gallons), from AP-42, Chapter 1.3-3 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation in accordance with Methods 1 - 4 and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
0.40 TPY OC

Applicable Compliance Method -

The annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall be ensured.

**1.i** Emission Limitation -  
104,682 gallons fuel oil usage

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.2. and shall be the sum of the monthly fuel oil usage rates for the calendar year.

Facility Name: **U.S. DoD Wright-Patterson AFB OH**  
Facility ID: **08-29-70-0441**  
Emissions Unit: **3003 (B113)**

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 5626 (B118)

**Activity Description:** Boiler; 16.75 MMBtu; natural gas-fired; F/10840

#### 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>
16.75 mmBtu/hour natural gas boiler with low NOx burner, Building 10840 (5626)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule
	NSPS 40 CFR Part 60, Subpart Dc	Exempt, See A.II.2.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-31-05(A)(3) PTI 08-3672	0.27 lb/hour and 0.93 TPY particulate emissions (PE);
		1.42 lbs/hour and 3.65 TPY nitrogen oxides (NOx);
		0.01 lb/hour and 0.03 TPY sulfur dioxide (SO <sub>2</sub> );
		1.41 lbs/hour and 3.78 TPY carbon monoxide (CO);
	0.10 lb/hour and 0.26 TPY organic compounds (OC)	
	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B), 3745-17-07(A), 3745-23-06(B) and 3745-21-08(B) and 40 CFR, Part 60, Subpart Dc.	

## 2. Additional Terms and Conditions

- 2.a** The hourly limitations were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-3672.

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

- 2.c** There are no SO<sub>2</sub> emission limitations established by Chapter 3745-18-06 for this emissions unit because natural gas is the only fuel burned in the emissions unit.

## II. Operational Restrictions

1. The maximum annual natural gas usage for this emissions unit shall not exceed 90 million cubic feet.
2. The permittee shall burn only natural gas in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the natural gas burned in this emissions unit.
2. For each day during which the permittee burns a fuel other than natural gas, 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 submit annual reports that summarize the actual annual fuel oil usage for the previous calendar year for this emissions unit. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
0.020 pound PE per mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).

**V. Testing Requirements (continued)**

**1.b** Emission Limitation -

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

**1.c** Emission Limitation -

0.27 lb/hour PE

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98).

If required, compliance with the limitation above shall be demonstrated in accordance with Methods 1 - 5 of 40 CFR, APart 60, Appendix A.

Emission Limitation -

0.93 TPY PE

Applicable Compliance Method -

As long as compliance with the annual natural gas usage restriction is maintained, compliance with the annual emission limitation shall be ensured.

**1.d** Emission Limitation -

1.42 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (100 lbs NO<sub>x</sub>/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable NO<sub>x</sub> emission limitation in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

Emission Limitation -

3.65 TPY NO<sub>x</sub>

Applicable Compliance Method -

As long as compliance with the annual natural gas usage restriction is maintained, compliance with the annual emission limitation shall be ensured.

## V. Testing Requirements (continued)

- 1.e** Emission Limitation -  
0.01 lb/hour SO<sub>2</sub>

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (0.6 lb SO<sub>2</sub>/mm cu. ft), from AP-42, Chapter 1.4-2 (revised 7/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable SO<sub>2</sub> emission limitation in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

- Emission Limitation -  
0.03 TPY SO<sub>2</sub>

Applicable Compliance Method -

As long as compliance with the annual natural gas usage restriction is maintained, compliance with the annual emission limitation shall be ensured.

- 1.f** Emission Limitation -  
1.41 lbs/hour CO

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (84 lbs CO/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

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

- Emission Limitation -  
3.78 TPY CO

Applicable Compliance Method -

As long as compliance with the annual natural gas usage restriction is maintained, compliance with the annual emission limitation shall be ensured.

- 1.g** Emission Limitation -  
0.10 lb/hour OC

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu ft/hour) by the emission factor of 5.5 lbs OC/mm cu ft, from AP-42, Chapter 1.4-2 (revised 7/98).

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation in accordance with Methods 1 - 4 and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

- Emission Limitation -  
0.26 TPY OC

Applicable Compliance Method -

As long as compliance with the annual natural gas usage restriction is maintained, compliance with the annual emission limitation shall be ensured.

**V. Testing Requirements (continued)**

**1.h** Operational Limitation -  
90 mm cu. ft/year natural gas usage

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 5851 (B302)

**Activity Description:** Boiler; 20.93 MMBtu; natural gas-fired ; F/20559

#### 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>
20.93 mmBtu/hour natural gas boiler, Building 20559 (5851)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule
	NSPS 40 CFR Part 60, Subpart Dc	Exempt, See A.II.2.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-31-05(A)(3) PTI 08-3429	0.42 lb/hour and 1.83 TPY particulate emissions (PE);
		2.93 lbs/hour and 12.8 TPY nitrogen oxides (NOx);
		0.013 lb/hour and 0.055 TPY sulfur dioxide (SO2);
		1.76 lbs/hour and 7.71 TPY carbon monoxide (CO);
		0.12 lb/hour and 0.53 TPY organic compounds (OC)
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B), 3745-17-07(A), 3745-23-06(B) and 3745-21-08(B) and 40 CFR, Part 60, Subpart Dc.

## 2. Additional Terms and Conditions

- 2.a** The hourly limitations were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-3429.

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

- 2.c** There are no SO<sub>2</sub> emission limitations established by Chapter 3745-18-06 for this emissions unit because natural gas is the only fuel burned in the emissions unit.

## II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, 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 submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a** Emission Limitation -  
0.020 pound PE per mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).

- 1.b** Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

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

**1.c** Emission Limitation -  
0.42 lb/hour PE

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98).

If required, compliance with the limitation above shall be demonstrated in accordance with Methods 1 - 5 of 40 CFR, APart 60, Appendix A.

Emission Limitation -  
1.83 TPY PE

Applicable Compliance Method -

The annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall be ensured.

**1.d** Emission Limitation -  
2.93 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (100 lbs NO<sub>x</sub>/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable NO<sub>x</sub> emission limitation in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
12.8 TPY NO<sub>x</sub>

Applicable Compliance Method -

The annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall be ensured.

**1.e** Emission Limitation -  
0.013 lb/hour SO<sub>2</sub>

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (0.6 lb SO<sub>2</sub>/mm cu. ft), from AP-42, Chapter 1.4-2 (revised 7/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable SO<sub>2</sub> emission limitation in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
0.055 TPY SO<sub>2</sub>

Applicable Compliance Method -

The annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall be ensured.

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

- 1.f** Emission Limitation -  
1.76 lbs/hour CO

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (84 lbs CO/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

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

- Emission Limitation -  
7.71 TPY CO

Applicable Compliance Method -

The annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall be ensured.

- 1.g** Emission Limitation -  
0.12 lb/hour OC

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu ft/hour) by the emission factor of 5.5 lbs OC/mm cu ft, from AP-42, Chapter 1.4-2 (revised 7/98).

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation in accordance with Methods 1 - 4 and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

- Emission Limitation -  
53 TPY OC

Applicable Compliance Method -

The annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual emission limitation shall be ensured.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2759 (B307)

**Activity Description:** Boiler (#2); 96.9 MMBTU; natural gas-fired; F/20770

#### 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>
96.9 mmBtu/hour natural gas-fired boiler No. 2, Building 20770 (2759)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule
	OAC rule 3745-31-05(D) PTI 08-3441	1.94 lbs/hour PE and 5.21 TPY PE as a rolling, 12-month summation;
		11.63 lbs/hour nitrogen oxides (NOx) and 31.26 TPY NOx as a rolling, 12-month summation;
		0.059 lb/hour sulfur dioxide (SO2) and 0.16 TPY SO2 as a rolling, 12-month summation;
		8.25 lbs/hour carbon monoxide (CO) and 22.18 TPY CO as a rolling, 12-month summation;
		0.57 lb/hour organic compounds (OC) and 1.53 TPY OC as a rolling, 12-month summation
	NSPS 40 CFR Part 60, Subpart Dc	Exempt, See A.II.2.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c.
	OAC rule 3745-31-05(A)(3) PTI 08-3441	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-05(D), 3745-17-10(B), 3745-17-07(A), 3745-23-06(B) and 3745-21-08(B) and 40 CFR, Part 60, Subpart Dc.

## 2. Additional Terms and Conditions

- 2.a The hourly limitations were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b There are no SO<sub>2</sub> emission limitations established by Chapter 3745-18-06 for this emissions unit because natural gas is the only fuel burned in the emissions unit.
- 2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-3441.

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 maximum annual natural gas usage for this emissions unit shall not exceed 528 mm cu. ft, based upon a rolling, 12-month summation of the monthly natural gas usage rates.
- 2. The permittee shall burn only natural gas in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall calculate and maintain monthly records of the following information for this emissions unit:
  - a. The natural gas usage rate, in mm cu. ft.
  - b. The rolling, 12-month summation of the natural gas usage rates, in mm cu. ft.
  - c. The monthly emission rate for each pollutant (PE, NO<sub>x</sub>, SO<sub>2</sub>, CO, and OC), in pounds, calculated as follows:
    - i. for PE, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98);
    - ii. for NO<sub>x</sub>, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft, from AP-42, Chapter 1.4-1 (revised 2/98);
    - iii. for SO<sub>2</sub>, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98);
    - iv. for CO, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 84 lbs CO/mm cu ft, from AP-42, Chapter 1.4-1 (revised 2/98); and
    - v. for OC, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 5.5 lbs OC/mm cu ft, from AP-42, Chapter 1.4-2 (revised 7/98).
  - d. The rolling, 12-month summation of the emission rates of each pollutant (PE, NO<sub>x</sub>, SO<sub>2</sub>, CO, and OC), in tons.
- 2. For each day during which the permittee burns a fuel other than natural gas, 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 submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations of 5.21 tons, 31.26 tons, 0.16 ton, 22.18 tons and 1.53 tons (for PE, NO<sub>x</sub>, SO<sub>2</sub>, CO and OC, respectively) and the rolling, 12-month natural gas usage restriction of 528 mm cu. ft. These reports shall be due by the dates specified in Part 1 - General Terms and Conditions of this permit under section (A)(1).
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
0.020 pound PE per mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).

- 1.b Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 1.c Emission Limitation -  
1.94 lbs/hour PE

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98).

If required, compliance with the limitation above shall be demonstrated in accordance with Methods 1 - 5 of 40 CFR, APart 60, Appendix A.

Emission Limitation -  
5.21 tons PE/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**V. Testing Requirements (continued)**

**1.d** Emission Limitation -  
11.63 lbs/hour NOx

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (100 lbs NOx/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable NOx emission limitation in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
31.26 tons NOx/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**1.e** Emission Limitation -  
0.059 lb/hour SO2

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (0.6 lb SO2/mm cu. ft), from AP-42, Chapter 1.4-2 (revised 7/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable SO2 emission limitation in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
0.16 ton SO2/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**1.f** Emission Limitation -  
8.25 lbs/hour CO

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (84 lbs CO/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

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

Emission Limitation -  
22.18 tons CO/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**V. Testing Requirements (continued)**

**1.g** Emission Limitation -  
0.57 lb/hour OC

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu ft/hour) by the emission factor of 5.5 lbs OC/mm cu ft, from AP-42, Chapter 1.4-2 (revised 7/98).

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation in accordance with Methods 1 - 4 and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
1.53 tons OC/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**1.h** Emission Limitation -  
528 mm cu. ft natural gas usage, as a rolling 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2758 (B308)

**Activity Description:** Boiler (#1); 96.9 MMBTU; natural gas fired; F/20770

#### 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>
96.9 mmBtu/hour natural gas-fired boiler No. 1, Building 20770 (2758)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule
	OAC rule 3745-31-05(D) PTI 08-3441	1.94 lbs/hour PE and 5.21 TPY PE as a rolling, 12-month summation;
		11.63 lbs/hour nitrogen oxides (NOx) and 31.26 TPY NOx as a rolling, 12-month summation;
		0.059 lb/hour sulfur dioxide (SO2) and 0.16 TPY SO2 as a rolling, 12-month summation;
		8.25 lbs/hour carbon monoxide (CO) and 22.18 TPY CO as a rolling, 12-month summation;
		0.57 lb/hour organic compounds (OC) and 1.53 TPY OC as a rolling, 12-month summation
	NSPS 40 CFR Part 60, Subpart Dc	Exempt, See A.II.2.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-31-05(A)(3) PTI 08-3441	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-31-05(D), 3745-17-10(B), 3745-17-07(A), 3745-23-06(B) and 3745-21-08(B) and 40 CFR, Part 60, Subpart Dc.

## 2. Additional Terms and Conditions

**2.a** The hourly limitations were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.

**2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-3441.

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

**2.c** There are no SO<sub>2</sub> emission limitations established by Chapter 3745-18-06 for this emissions unit because natural gas is the only fuel burned in the emissions unit.

## II. Operational Restrictions

1. The maximum annual natural gas usage for this emissions unit shall not exceed 528 mm cu. ft, based upon a rolling, 12-month summation of the monthly natural gas usage rates.
2. The permittee shall burn only natural gas in this emissions unit.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall calculate and maintain monthly records of the following information for this emissions unit:
  - a. The natural gas usage rate, in mm cu. ft.
  - b. The rolling, 12-month summation of the natural gas usage rates, in mm cu. ft.
  - c. The monthly emission rate for each pollutant (PE, NO<sub>x</sub>, SO<sub>2</sub>, CO, and OC), in pounds, calculated as follows:
    - i. for PE, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98);
    - ii. for NO<sub>x</sub>, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft, from AP-42, Chapter 1.4-1 (revised 2/98);
    - iii. for SO<sub>2</sub>, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98);
    - iv. for CO, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 84 lbs CO/mm cu ft, from AP-42, Chapter 1.4-1 (revised 2/98); and
    - v. for OC, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 5.5 lbs OC/mm cu ft, from AP-42, Chapter 1.4-2 (revised 7/98).
  - d. The rolling, 12-month summation of the emission rates of each pollutant (PE, NO<sub>x</sub>, SO<sub>2</sub>, CO, and OC), in tons.
2. For each day during which the permittee burns a fuel other than natural gas, 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 submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations of 5.21 tons, 31.26 tons, 0.16 ton, 22.18 tons and 1.53 tons (for PE, NO<sub>x</sub>, SO<sub>2</sub>, CO and OC, respectively) and the rolling, 12-month natural gas usage restriction of 528 mm cu. ft. These reports shall be due by the dates specified in Part 1 - General Terms and Conditions of this permit under section (A)(1).
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
0.020 pound PE per mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).

- 1.b Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 1.c Emission Limitation -  
1.94 lbs/hour PE

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98).

If required, compliance with the limitation above shall be demonstrated in accordance with Methods 1 - 5 of 40 CFR, APart 60, Appendix A.

Emission Limitation -  
5.21 tons PE/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**V. Testing Requirements (continued)**

**1.d** Emission Limitation -  
11.63 lbs/hour NOx

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (100 lbs NOx/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable NOx emission limitation in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
31.26 tons NOx/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**1.e** Emission Limitation -  
0.059 lb/hour SO<sub>2</sub>

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (0.6 lb SO<sub>2</sub>/mm cu. ft), from AP-42, Chapter 1.4-2 (revised 7/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable SO<sub>2</sub> emission limitation in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
0.16 ton SO<sub>2</sub>/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**1.f** Emission Limitation -  
8.25 lbs/hour CO

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (84 lbs CO/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

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

Emission Limitation -  
22.18 tons CO/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**V. Testing Requirements (continued)**

**1.g** Emission Limitation -  
0.57 lb/hour OC

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu ft/hour) by the emission factor of 5.5 lbs OC/mm cu ft, from AP-42, Chapter 1.4-2 (revised 7/98).

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation in accordance with Methods 1 - 4 and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
1.53 tons OC/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**1.h** Emission Limitation -  
528 mm cu. ft natural gas usage, as a rolling 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2030 (B309)

**Activity Description:** Boiler (#4); 183 MMBTU; coal fired; F/20770

**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>
B309 - 183 mmBtu/hour coal-fired spreader stoker boiler No. 4, with baghouse control limited to a maximum heat input of 169 mmBtu/hour, Building 20770 (2030)	40 CFR Part 51, Appendix S OAC rules 3745-31-21 through 3745-31-27	<p>Particulate emissions (PE) shall not exceed 0.10 lb/mmBtu actual heat input;</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 2.0 lbs/mmBtu actual heat input;</p> <p>155 tons PE, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p> <p>2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p>

**Operations, Property,  
and/or Equipment**

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

OAC rule 3745-31-05(A)(3)

The requirements of this rule also include compliance with the requirements of 40 CFR Part 51, Appendix S, OAC rules 3745-31-21 through 3745-31-27, 3745-17-07(A)(1), 3745-23-06(B) and 3745-21-08(B).

16.9 lbs/hour PE

56.78 TPY PE from this emissions unit

338 lbs/hour SO<sub>2</sub>

1135.68 TPY SO<sub>2</sub> from this emissions unit

Nitrogen oxides (NO<sub>x</sub>) emissions shall not exceed 0.6 lb/mmBtu actual heat input

336.54 TPY NO<sub>x</sub> from this emissions unit

788 tons NO<sub>x</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

Carbon monoxide (CO) emissions shall not exceed 0.18 lb/mmBtu actual heat input

105.17 TPY CO from this emissions unit

236.34 tons CO, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

OAC rule 3745-17-07(A)(1)

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-10(C)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rule 3745-18-35(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.

**2. Additional Terms and Conditions**

- 2.a** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-1984.

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**

- The quality of coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limit in Section A.I. above.
- This emissions unit shall be completely shutdown during the months of June, July, and August.
- The maximum allowable total heat input for this emissions unit shall be limited to 169 mmBtu/hour. This total heat input of 169 mmBtu/hour corresponds to a steam load of 136,000 pounds per hour. At no time shall the steam flow rate from this emissions unit exceed 136,000 pounds per hour (as an average over any one-hour period).
- The maximum allowable total heat input for any two of emissions units B309, B310 and B311, combined, shall be limited to 332 mmBtu/hour. This total combined heat input of 332 mmBtu/hour corresponds to a steam load of 265,600 pounds per hour. At no time shall the steam flow rate from any two of the boilers, identified as B309, B310, and B311, combined, exceed 265,600 pounds per hour (as an average over any one-hour period).
- The maximum allowable total heat input for the three boilers identified as B309, B310, and B311, combined, shall be limited to 500 mmBtu/hour. This total combined heat input of 500 mmBtu/hour corresponds to a steam load of 400,000 pounds per hour. At no time shall the steam flow rate from all three boilers, identified as B309, B310, and B311, combined, exceed 400,000 pounds per hour (as an average over any one-hour period).
- The pressure drop across the baghouse shall be maintained within the range of 0.5 to 6.5 inches of water while the emissions unit is in operation.

**II. Operational Restrictions (continued)**

- 7. The maximum annual heat input for emissions units B309, B310, B311, B606, B607, and B608, combined, shall not exceed 2,626,000 mmBtu, as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following final issuance of the PTI, the permittee shall not exceed the heat input levels from emissions units B309, B310, B311, B606, B607, and B608, combined, specified in the following table:

Month(	Maximum Allow Cumulative Heat Input (mmBtu)
	292,000
1 -	584,000
1 -	876,000
1 -	1,168,000
1 -	1,460,000
1 -	1,752,000
1 -	2,044,000
1 -	2,336,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000

After the first 12 calendar months of operation following issuance of the PTI, compliance with the annual heat input limitation for emissions units B309, B310, B311, B606, B607, and B608, combined, shall be based upon a rolling, 12-month summation of the heat inputs.

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

- 1. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

2. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The total quantity of coal burned, in tons.
  - b. The average ash content (percent) of the coal burned.
  - c. The average sulfur content (percent) of the coal burned.
  - d. The average heat content of the coal burned, in Btu/pound.
  - e. The average SO<sub>2</sub> emission rate from the coal burned, in lbs SO<sub>2</sub>/mmBtu of actual heat input.
  - f. The total heat input (a x d x 2000), in mmBtu.
  - g. The PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons, calculated as follows;
    - i. for PE, multiply the total heat input, from section A.III.2.f above, by the emission factor of 0.01 lb PE/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - ii. for SO<sub>2</sub>, multiply the total heat input, from section A.III.2.f above, by the emission factor of 1.21 lb SO<sub>2</sub>/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - iii. for NO<sub>x</sub>, multiply the total amount of coal burned, from section A.III.2.a above, by the company-supplied emission factor of 16.0 lbs NO<sub>x</sub>/ton of coal, and divide by 2000; and
    - iv. for CO, multiply the total amount of coal burned, from section A.III.2.a above, by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5.0 lbs CO/ton of coal, and divide by 2000.
3. The permittee shall maintain monthly records of the following information for emissions units B309, B310, B311, B606, B607 and B608, combined:
  - a. The total heat input (summation of the heat input rates for emissions units B309, B310, B311, B606, B607 and B608), in mmBtu.
  - b. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summation of the heat input rates, in mmBtu. Also, for the first 12 calendar months of operation following final issuance of the PTI, the permittee shall record the cumulative heat input rates, in mmBtu, for each calendar month.
  - c. The total PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates (summation of the emission rates for each pollutant for emissions units B309, B310, B311, B606, B607 and B608), in tons.
  - d. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summations of the PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons.

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

4. The permittee shall collect representative grab samples of the coal burned in this emissions unit daily. Each sample shall be collected from the coal conveyor belt. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotheribol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

5. To obtain an exemption from the visible emissions limitations specified in OAC rule 3745-17-07(A), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the baghouse (a) during all periods of start-up until the baghouse is operational or until the inlet temperature of the baghouse achieves a temperature of three hundred fifty (350) degrees Fahrenheit (b) during all periods of shutdown until the inlet temperature of the baghouse drops below the temperature of three hundred fifty (350) degrees Fahrenheit. An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

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

6. The permittee shall continuously monitor and record the steam flow rate for this emissions unit. Copies of all steam flow rate charts shall be maintained for a period of 5 years, and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request.

The permittee shall maintain daily records of the following information in order to determine compliance with the hourly steam load limitations:

- a. The total steam load for this emissions unit for all periods of time when only this boiler is in operation, in pounds steam per day.
- b. The total hours of operation for all periods of time when only this boiler is in operation.
- c. The average hourly steam load for this emissions unit for all periods of time when only this boiler is in operation, in pounds steam per hour (i.e., (a)/(b)).
- d. The total steam load for all periods of time when any two of the boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per day.
- e. The total hours of operation for all periods of time when any two of the boilers identified as emissions units B309, B310, and B311 are in operation.
- f. The average hourly steam load for all periods of time when any two of the boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per hour (i.e., (d)/(e)).
- g. The total steam load for all periods of time when all three boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per day.
- h. The total hours of operation for all periods of time when all three boilers identified as emissions units B309, B310, and B311 are in operation.
- i. The average hourly steam load for all periods of time when all three boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per hour (i.e., (g)/(h)).

7. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

### IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

#### IV. Reporting Requirements (continued)

2. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October of each year and shall address the data obtained during the previous calendar quarter.

3. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
- The total quantity of coal burned (tons).
  - The average ash content (percent) of the coal burned.
  - The average sulfur content (percent) of the coal burned.
  - The average heat content (Btu/pound) of the coal burned.
  - The average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the data obtained during the previous calendar quarters.

4. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:
- All exceedances of the hourly steam flow rate limitation of 136,00 pounds (for this emissions unit), and the actual hourly steam flow rate for each such exceedance.
  - All exceedances of the hourly steam flow rate limitation, for any two of the boilers identified as B309, B310, and B311, combined, of 265,000 pounds, and the actual hourly steam flow rate for each such exceedance.
  - All exceedances of the total hourly steam flow rate limitation, for all three of the boilers identified as B309, B310, and B311, combined, of 400,000 pounds, and the actual hourly steam flow rate for each such exceedance.
  - All periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
  - All exceedances of the rolling, 12-month heat input limitation, for emissions units B309, B310, B311, B606, B607, and B608, combined, of 2,626,000, and for the first 12 calendar months of operation following final issuance of this permit, all exceedances of the maximum allowable cumulative combined heat input rates.
  - All exceedances of the rolling, 12-month PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission limitations of 155 tons, 2626 tons, 788 tons, and 236.34 tons, respectively (for emissions units B309, B310, B311, B606, B607, and B608, combined).

These reports shall be submitted in accordance with Section A.1.c. of the General Terms and Conditions.

5. The permittee shall submit annual reports that summarize the actual annual PE, NO<sub>x</sub>, SO<sub>2</sub> and CO emissions for this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation -  
0.10 lb PE/mmBtu actual heat input

Applicable Compliance Method -

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

- b. Emission Limitation -  
2.0 lbs sulfur dioxide/mmBtu actual heat input

Applicable Compliance Method -

The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Compliance shall also be based upon the record keeping requirements specified in A.III.2. and the use of the equation contained in OAC rule 3745-18-04(F).

- c. Emission Limitation -  
155 tons PE, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable PE limitation of 0.1 lb PE/mmBtu are maintained, compliance with the rolling, 12-month PE limitation above shall be ensured.

**V. Testing Requirements (continued)**

d. Emission Limitation -

2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable SO<sub>2</sub> emission limitation of 2.0 lbs SO<sub>2</sub>/mmBtu are maintained, compliance with the rolling, 12-month SO<sub>2</sub> emission limitation above shall be ensured.

e. Emission Limitation -

16.9 lbs/hour PE

Applicable Compliance Method -

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

f. Emission Limitation -

56.78 TPY PE

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

g. Emission Limitation -

338 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

h. Emission Limitation -  
1135.68 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

i. Emission Limitation -  
0.6 lb NO<sub>x</sub>/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the facility-tested emission factor of 16 lbs NO<sub>x</sub>/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 7.

j. Emission Limitation -  
336.54 TPY NO<sub>x</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

k. Emission Limitation -  
788 tons NO<sub>x</sub>, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608 combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable NO<sub>x</sub> emission limitation of 0.6 lb NO<sub>x</sub>/mmBtu are maintained, compliance with the rolling, 12-month NO<sub>x</sub> emission limitation above shall be ensured.

l. Emission Limitation -  
0.18 lb CO/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5 lbs CO/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 10.

m. Emission Limitation -  
105.17 TPY CO

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

## V. Testing Requirements (continued)

n. Emission Limitation -

236.34 tons CO, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable CO emission limitation of 0.18 lb CO/mmBtu are maintained, compliance with the rolling, 12-month CO emission limitation above shall be ensured.

o. Emission Limitation -

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by February 2003 and every three years thereafter.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rates for PE and SO<sub>2</sub>.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. for PE, Methods 1 - 5 of 40 CFR, Part 60, Appendix A.; and
    - ii. for SO<sub>2</sub>, Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

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

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

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

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2028 (B310)

**Activity Description:** Boiler (#3); 183 MMBTU; coal fired; F/20770

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B310 - 183 mmBtu/hour coal-fired spreader stoker boiler No. 3, with baghouse control limited to a maximum heat input of 169 mmBtu/hour, Building 20770 (2028)	40 CFR Part 51, Appendix S OAC rules 3745-31-21 through 3745-31-27	<p>Particulate emissions (PE) shall not exceed 0.10 lb/mmBtu actual heat input;</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 2.0 lbs/mmBtu actual heat input;</p> <p>155 tons PE, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p> <p>2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p>

**Operations, Property,  
and/or Equipment**

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

OAC rule 3745-31-05(A)(3)

The requirements of this rule also include compliance with the requirements of 40 CFR Part 51, Appendix S, OAC rules 3745-31-21 through 3745-31-27, 3745-17-07(A)(1), 3745-23-06(B) and 3745-21-08(B).

16.9 lbs/hour PE

56.78 TPY PE from this emissions unit

338 lbs/hour SO<sub>2</sub>

1135.68 TPY SO<sub>2</sub> from this emissions unit

Nitrogen oxides (NO<sub>x</sub>) emissions shall not exceed 0.6 lb/mmBtu actual heat input

336.54 TPY NO<sub>x</sub> from this emissions unit

788 tons NO<sub>x</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

Carbon monoxide (CO) emissions shall not exceed 0.18 lb/mmBtu actual heat input

105.17 TPY CO from this emissions unit

236.34 tons CO, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

OAC rule 3745-17-07(A)(1)

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-10(C)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rule 3745-18-35(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.

**2. Additional Terms and Conditions**

- 2.a** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-1984.

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 quality of coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limit in Section A.I. above.
2. This emissions unit shall be completely shutdown during the months of June, July, and August.
3. The maximum allowable total heat input for this emissions unit shall be limited to 169 mmBtu/hour. This total heat input of 169 mmBtu/hour corresponds to a steam load of 136,000 pounds per hour. At no time shall the steam flow rate from this emissions unit exceed 136,000 pounds per hour (as an average over any one-hour period).
4. The maximum allowable total heat input for any two of emissions units B309, B310 and B311, combined, shall be limited to 332 mmBtu/hour. This total combined heat input of 332 mmBtu/hour corresponds to a steam load of 265,600 pounds per hour. At no time shall the steam flow rate from any two of the boilers, identified as B309, B310, and B311, combined, exceed 265,600 pounds per hour (as an average over any one-hour period).
5. The maximum allowable total heat input for the three boilers identified as B309, B310, and B311, combined, shall be limited to 500 mmBtu/hour. This total combined heat input of 500 mmBtu/hour corresponds to a steam load of 400,000 pounds per hour. At no time shall the steam flow rate from all three boilers, identified as B309, B310, and B311, combined, exceed 400,000 pounds per hour (as an average over any one-hour period).
6. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 6.5 inches of water while the emissions unit is in operation.

## II. Operational Restrictions (continued)

7. The maximum annual heat input for emissions units B309, B310, B311, B606, B607, and B608, combined, shall not exceed 2,626,000 mmBtu, as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following final issuance of the PTI, the permittee shall not exceed the heat input levels from emissions units B309, B310, B311, B606, B607, and B608, combined, specified in the following table:

Month(	Maximum Allow Cumulative Heat Input (mmBtu)
	292,000
1 -	584,000
1 -	876,000
1 -	1,168,000
1 -	1,460,000
1 -	1,752,000
1 -	2,044,000
1 -	2,336,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000

After the first 12 calendar months of operation following issuance of the PTI, compliance with the annual heat input limitation for emissions units B309, B310, B311, B606, B607, and B608, combined, shall be based upon a rolling, 12-month summation of the heat inputs.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

2. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The total quantity of coal burned, in tons.
  - b. The average ash content (percent) of the coal burned.
  - c. The average sulfur content (percent) of the coal burned.
  - d. The average heat content of the coal burned, in Btu/pound.
  - e. The average SO<sub>2</sub> emission rate from the coal burned, in lbs SO<sub>2</sub>/mmBtu of actual heat input.
  - f. The total heat input (a x d x 2000), in mmBtu.
  - g. The PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons, calculated as follows;
    - i. for PE, multiply the total heat input, from section A.III.2.f above, by the emission factor of 0.01 lb PE/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - ii. for SO<sub>2</sub>, multiply the total heat input, from section A.III.2.f above, by the emission factor of 1.21 lb SO<sub>2</sub>/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - iii. for NO<sub>x</sub>, multiply the total amount of coal burned, from section A.III.2.a above, by the company-supplied emission factor of 16.0 lbs NO<sub>x</sub>/ton of coal, and divide by 2000; and
    - iv. for CO, multiply the total amount of coal burned, from section A.III.2.a above, by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5.0 lbs CO/ton of coal, and divide by 2000.
3. The permittee shall maintain monthly records of the following information for emissions units B309, B310, B311, B606, B607 and B608, combined:
  - a. The total heat input (summation of the heat input rates for emissions units B309, B310, B311, B606, B607 and B608), in mmBtu.
  - b. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summation of the heat input rates, in mmBtu. Also, for the first 12 calendar months of operation following final issuance of the PTI, the permittee shall record the cumulative heat input rates, in mmBtu, for each calendar month.
  - c. The total PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates (summation of the emission rates for each pollutant for emissions units B309, B310, B311, B606, B607 and B608), in tons.
  - d. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summations of the PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons.

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

4. The permittee shall collect representative grab samples of the coal burned in this emissions unit daily. Each sample shall be collected from the coal conveyor belt. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotherm Bomb Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

5. To obtain an exemption from the visible emissions limitations specified in OAC rule 3745-17-07(A), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the baghouse (a) during all periods of start-up until the baghouse is operational or until the inlet temperature of the baghouse achieves a temperature of three hundred fifty (350) degrees Fahrenheit (b) during all periods of shutdown until the inlet temperature of the baghouse drops below the temperature of three hundred fifty (350) degrees Fahrenheit. An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

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

6. The permittee shall continuously monitor and record the steam flow rate for this emissions unit. Copies of all steam flow rate charts shall be maintained for a period of 5 years, and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request.

The permittee shall maintain daily records of the following information in order to determine compliance with the hourly steam load limitations:

- a. The total steam load for this emissions unit for all periods of time when only this boiler is in operation, in pounds steam per day.
- b. The total hours of operation for all periods of time when only this boiler is in operation.
- c. The average hourly steam load for this emissions unit for all periods of time when only this boiler is in operation, in pounds steam per hour (i.e., (a)/(b)).
- d. The total steam load for all periods of time when any two of the boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per day.
- e. The total hours of operation for all periods of time when any two of the boilers identified as emissions units B309, B310, and B311 are in operation.
- f. The average hourly steam load for all periods of time when any two of the boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per hour (i.e., (d)/(e)).
- g. The total steam load for all periods of time when all three boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per day.
- h. The total hours of operation for all periods of time when all three boilers identified as emissions units B309, B310, and B311 are in operation.
- i. The average hourly steam load for all periods of time when all three boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per hour (i.e., (g)/(h)).

7. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

### IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

#### IV. Reporting Requirements (continued)

2. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October of each year and shall address the data obtained during the previous calendar quarter.

3. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
- The total quantity of coal burned (tons).
  - The average ash content (percent) of the coal burned.
  - The average sulfur content (percent) of the coal burned.
  - The average heat content (Btu/pound) of the coal burned.
  - The average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the data obtained during the previous calendar quarters.

4. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:
- All exceedances of the hourly steam flow rate limitation of 136,00 pounds (for this emissions unit), and the actual hourly steam flow rate for each such exceedance.
  - All exceedances of the hourly steam flow rate limitation, for any two of the boilers identified as B309, B310, and B311, combined, of 265,000 pounds, and the actual hourly steam flow rate for each such exceedance.
  - All exceedances of the total hourly steam flow rate limitation, for all three of the boilers identified as B309, B310, and B311, combined, of 400,000 pounds, and the actual hourly steam flow rate for each such exceedance.
  - All periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
  - All exceedances of the rolling, 12-month heat input limitation, for emissions units B309, B310, B311, B606, B607, and B608, combined, of 2,626,000, and for the first 12 calendar months of operation following final issuance of this permit, all exceedances of the maximum allowable cumulative combined heat input rates.
  - All exceedances of the rolling, 12-month PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission limitations of 155 tons, 2626 tons, 788 tons, and 236.34 tons, respectively (for emissions units B309, B310, B311, B606, B607, and B608, combined).

These reports shall be submitted in accordance with Section A.1.c. of the General Terms and Conditions.

5. The permittee shall submit annual reports that summarize the actual annual PE, NO<sub>x</sub>, SO<sub>2</sub> and CO emissions for this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation -  
0.10 lb PE/mmBtu actual heat input

Applicable Compliance Method -

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

- b. Emission Limitation -  
2.0 lbs sulfur dioxide/mmBtu actual heat input

Applicable Compliance Method -

The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Compliance shall also be based upon the record keeping requirements specified in A.III.2. and the use of the equation contained in OAC rule 3745-18-04(F).

- c. Emission Limitation -  
155 tons PE, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable PE limitation of 0.1 lb PE/mmBtu are maintained, compliance with the rolling, 12-month PE limitation above shall be ensured.

**V. Testing Requirements (continued)**

d. Emission Limitation -

2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable SO<sub>2</sub> emission limitation of 2.0 lbs SO<sub>2</sub>/mmBtu are maintained, compliance with the rolling, 12-month SO<sub>2</sub> emission limitation above shall be ensured.

e. Emission Limitation -

16.9 lbs/hour PE

Applicable Compliance Method -

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

f. Emission Limitation -

56.78 TPY PE

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

g. Emission Limitation -

338 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

h. Emission Limitation -  
1135.68 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

i. Emission Limitation -  
0.6 lb NO<sub>x</sub>/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the facility-tested emission factor of 16 lbs NO<sub>x</sub>/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 7.

j. Emission Limitation -  
336.54 TPY NO<sub>x</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

k. Emission Limitation -  
788 tons NO<sub>x</sub>, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608 combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable NO<sub>x</sub> emission limitation of 0.6 lb NO<sub>x</sub>/mmBtu are maintained, compliance with the rolling, 12-month NO<sub>x</sub> emission limitation above shall be ensured.

l. Emission Limitation -  
0.18 lb CO/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5 lbs CO/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 10.

m. Emission Limitation -  
105.17 TPY CO

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

## V. Testing Requirements (continued)

n. Emission Limitation -

236.34 tons CO, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable CO emission limitation of 0.18 lb CO/mmBtu are maintained, compliance with the rolling, 12-month CO emission limitation above shall be ensured.

o. Emission Limitation -

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by February 2003 and every three years thereafter.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rates for PE and SO<sub>2</sub>.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. for PE, Methods 1 - 5 of 40 CFR, Part 60, Appendix A.; and
    - ii. for SO<sub>2</sub>, Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

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

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

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

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2033 (B311)

**Activity Description:** Boiler (#5); 183 MMBTU; coal fired; F/20770

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B311 - 183 mmBtu/hour coal-fired spreader stoker boiler No. 5, with baghouse control limited to a maximum heat input of 169 mmBtu/hour, Building 20770 (2033	40 CFR Part 51, Appendix S OAC rules 3745-31-21 through 3745-31-27	<p>Particulate emissions (PE) shall not exceed 0.10 lb/mmBtu actual heat input;</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 2.0 lbs/mmBtu actual heat input;</p> <p>155 tons PE, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p> <p>2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p>

**Operations, Property,  
and/or Equipment**

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

OAC rule 3745-31-05(A)(3)

The requirements of this rule also include compliance with the requirements of 40 CFR Part 51, Appendix S, OAC rules 3745-31-21 through 3745-31-27, 3745-17-07(A)(1), 3745-23-06(B) and 3745-21-08(B).

16.9 lbs/hour PE

56.78 TPY PE from this emissions unit

338 lbs/hour SO<sub>2</sub>

1135.68 TPY SO<sub>2</sub> from this emissions unit

Nitrogen oxides (NO<sub>x</sub>) emissions shall not exceed 0.6 lb/mmBtu actual heat input

336.54 TPY NO<sub>x</sub> from this emissions unit

788 tons NO<sub>x</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

Carbon monoxide (CO) emissions shall not exceed 0.18 lb/mmBtu actual heat input

105.17 TPY CO from this emissions unit

236.34 tons CO, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

OAC rule 3745-17-07(A)(1)

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-10(C)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rule 3745-18-35(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.

**2. Additional Terms and Conditions**

- 2.a** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-1984.

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**

- The quality of coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limit in Section A.I. above.
- This emissions unit shall be completely shutdown during the months of June, July, and August.
- The maximum allowable total heat input for this emissions unit shall be limited to 169 mmBtu/hour. This total heat input of 169 mmBtu/hour corresponds to a steam load of 136,000 pounds per hour. At no time shall the steam flow rate from this emissions unit exceed 136,000 pounds per hour (as an average over any one-hour period).
- The maximum allowable total heat input for any two of emissions units B309, B310 and B311, combined, shall be limited to 332 mmBtu/hour. This total combined heat input of 332 mmBtu/hour corresponds to a steam load of 265,600 pounds per hour. At no time shall the steam flow rate from any two of the boilers, identified as B309, B310, and B311, combined, exceed 265,600 pounds per hour (as an average over any one-hour period).
- The maximum allowable total heat input for the three boilers identified as B309, B310, and B311, combined, shall be limited to 500 mmBtu/hour. This total combined heat input of 500 mmBtu/hour corresponds to a steam load of 400,000 pounds per hour. At no time shall the steam flow rate from all three boilers, identified as B309, B310, and B311, combined, exceed 400,000 pounds per hour (as an average over any one-hour period).
- The pressure drop across the baghouse shall be maintained within the range of 0.5 to 6.5 inches of water while the emissions unit is in operation.

## II. Operational Restrictions (continued)

7. The maximum annual heat input for emissions units B309, B310, B311, B606, B607, and B608, combined, shall not exceed 2,626,000 mmBtu, as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following final issuance of the PTI, the permittee shall not exceed the heat input levels from emissions units B309, B310, B311, B606, B607, and B608, combined, specified in the following table:

Month(	Maximum Allow Cumulative Heat Input (mmBtu)
	292,000
1 -	584,000
1 -	876,000
1 -	1,168,000
1 -	1,460,000
1 -	1,752,000
1 -	2,044,000
1 -	2,336,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000

After the first 12 calendar months of operation following issuance of the PTI, compliance with the annual heat input limitation for emissions units B309, B310, B311, B606, B607, and B608, combined, shall be based upon a rolling, 12-month summation of the heat inputs.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

2. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The total quantity of coal burned, in tons.
  - b. The average ash content (percent) of the coal burned.
  - c. The average sulfur content (percent) of the coal burned.
  - d. The average heat content of the coal burned, in Btu/pound.
  - e. The average SO<sub>2</sub> emission rate from the coal burned, in lbs SO<sub>2</sub>/mmBtu of actual heat input.
  - f. The total heat input (a x d x 2000), in mmBtu.
  - g. The PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons, calculated as follows;
    - i. for PE, multiply the total heat input, from section A.III.2.f above, by the emission factor of 0.01 lb PE/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - ii. for SO<sub>2</sub>, multiply the total heat input, from section A.III.2.f above, by the emission factor of 1.21 lb SO<sub>2</sub>/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - iii. for NO<sub>x</sub>, multiply the total amount of coal burned, from section A.III.2.a above, by the company-supplied emission factor of 16.0 lbs NO<sub>x</sub>/ton of coal, and divide by 2000; and
    - iv. for CO, multiply the total amount of coal burned, from section A.III.2.a above, by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5.0 lbs CO/ton of coal, and divide by 2000.
3. The permittee shall maintain monthly records of the following information for emissions units B309, B310, B311, B606, B607 and B608, combined:
  - a. The total heat input (summation of the heat input rates for emissions units B309, B310, B311, B606, B607 and B608), in mmBtu.
  - b. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summation of the heat input rates, in mmBtu. Also, for the first 12 calendar months of operation following final issuance of the PTI, the permittee shall record the cumulative heat input rates, in mmBtu, for each calendar month.
  - c. The total PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates (summation of the emission rates for each pollutant for emissions units B309, B310, B311, B606, B607 and B608), in tons.
  - d. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summations of the PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons.

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

4. The permittee shall collect representative grab samples of the coal burned in this emissions unit daily. Each sample shall be collected from the coal conveyor belt. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isotheribol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

5. To obtain an exemption from the visible emissions limitations specified in OAC rule 3745-17-07(A), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the baghouse (a) during all periods of start-up until the baghouse is operational or until the inlet temperature of the baghouse achieves a temperature of three hundred fifty (350) degrees Fahrenheit (b) during all periods of shutdown until the inlet temperature of the baghouse drops below the temperature of three hundred fifty (350) degrees Fahrenheit. An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

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

6. The permittee shall continuously monitor and record the steam flow rate for this emissions unit. Copies of all steam flow rate charts shall be maintained for a period of 5 years, and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request.

The permittee shall maintain daily records of the following information in order to determine compliance with the hourly steam load limitations:

- a. The total steam load for this emissions unit for all periods of time when only this boiler is in operation, in pounds steam per day.
- b. The total hours of operation for all periods of time when only this boiler is in operation.
- c. The average hourly steam load for this emissions unit for all periods of time when only this boiler is in operation, in pounds steam per hour (i.e., (a)/(b)).
- d. The total steam load for all periods of time when any two of the boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per day.
- e. The total hours of operation for all periods of time when any two of the boilers identified as emissions units B309, B310, and B311 are in operation.
- f. The average hourly steam load for all periods of time when any two of the boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per hour (i.e., (d)/(e)).
- g. The total steam load for all periods of time when all three boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per day.
- h. The total hours of operation for all periods of time when all three boilers identified as emissions units B309, B310, and B311 are in operation.
- i. The average hourly steam load for all periods of time when all three boilers identified as emissions units B309, B310, and B311 are in operation, in pounds steam per hour (i.e., (g)/(h)).

7. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

### IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

#### IV. Reporting Requirements (continued)

2. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October of each year and shall address the data obtained during the previous calendar quarter.

3. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
- The total quantity of coal burned (tons).
  - The average ash content (percent) of the coal burned.
  - The average sulfur content (percent) of the coal burned.
  - The average heat content (Btu/pound) of the coal burned.
  - The average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the data obtained during the previous calendar quarters.

4. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:
- All exceedances of the hourly steam flow rate limitation of 136,00 pounds (for this emissions unit), and the actual hourly steam flow rate for each such exceedance.
  - All exceedances of the hourly steam flow rate limitation, for any two of the boilers identified as B309, B310, and B311, combined, of 265,000 pounds, and the actual hourly steam flow rate for each such exceedance.
  - All exceedances of the total hourly steam flow rate limitation, for all three of the boilers identified as B309, B310, and B311, combined, of 400,000 pounds, and the actual hourly steam flow rate for each such exceedance.
  - All periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
  - All exceedances of the rolling, 12-month heat input limitation, for emissions units B309, B310, B311, B606, B607, and B608, combined, of 2,626,000, and for the first 12 calendar months of operation following final issuance of this permit, all exceedances of the maximum allowable cumulative combined heat input rates.
  - All exceedances of the rolling, 12-month PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission limitations of 155 tons, 2626 tons, 788 tons, and 236.34 tons, respectively (for emissions units B309, B310, B311, B606, B607, and B608, combined).

These reports shall be submitted in accordance with Section A.1.c. of the General Terms and Conditions.

5. The permittee shall submit annual reports that summarize the actual annual PE, NO<sub>x</sub>, SO<sub>2</sub> and CO emissions for this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation -  
0.10 lb PE/mmBtu actual heat input

Applicable Compliance Method -

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

- b. Emission Limitation -  
2.0 lbs sulfur dioxide/mmBtu actual heat input

Applicable Compliance Method -

The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

Compliance shall also be based upon the record keeping requirements specified in A.III.2. and the use of the equation contained in OAC rule 3745-18-04(F).

- c. Emission Limitation -  
155 tons PE, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable PE limitation of 0.1 lb PE/mmBtu are maintained, compliance with the rolling, 12-month PE limitation above shall be ensured.

**V. Testing Requirements (continued)**

d. Emission Limitation -

2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable SO<sub>2</sub> emission limitation of 2.0 lbs SO<sub>2</sub>/mmBtu are maintained, compliance with the rolling, 12-month SO<sub>2</sub> emission limitation above shall be ensured.

e. Emission Limitation -

16.9 lbs/hour PE

Applicable Compliance Method -

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

f. Emission Limitation -

56.78 TPY PE

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

g. Emission Limitation -

338 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

h. Emission Limitation -  
1135.68 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

i. Emission Limitation -  
0.6 lb NO<sub>x</sub>/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the facility-tested emission factor of 16 lbs NO<sub>x</sub>/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 7.

j. Emission Limitation -  
336.54 TPY NO<sub>x</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

k. Emission Limitation -  
788 tons NO<sub>x</sub>, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608 combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable NO<sub>x</sub> emission limitation of 0.6 lb NO<sub>x</sub>/mmBtu are maintained, compliance with the rolling, 12-month NO<sub>x</sub> emission limitation above shall be ensured.

l. Emission Limitation -  
0.18 lb CO/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5 lbs CO/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 10.

m. Emission Limitation -  
105.17 TPY CO

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

## V. Testing Requirements (continued)

n. Emission Limitation -

236.34 tons CO, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable CO emission limitation of 0.18 lb CO/mmBtu are maintained, compliance with the rolling, 12-month CO emission limitation above shall be ensured.

o. Emission Limitation -

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by February 2003 and every three years thereafter.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rates for PE and SO<sub>2</sub>.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. for PE, Methods 1 - 5 of 40 CFR, Part 60, Appendix A.; and
    - ii. for SO<sub>2</sub>, Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

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

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

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

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2425 (B312)

**Activity Description:** Compressor air heater; natural gas, JP-4, JP-8 and kerosene -fired; F/20018C

#### 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>
55 mmBtu/hour compressed air heater, Building 20018C (2425)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input.
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule
	OAC rule 3745-18-06(E)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) PTI 08-3705	0.44 TPY PE, as a rolling, 12-month summation;  7.66 lbs/hour nitrogen oxides (NOx) and 3.06 TPY NOx, as a rolling, 12-month summation;  21.75 lbs/hour sulfur dioxide (SO2) and 8.70 TPY SO2, as a rolling, 12-month summation;  4.48 lbs/hour carbon monoxide (CO) and 1.79 TPY CO, as a rolling, 12-month summation;  0.21 lb/hour organic compounds (OC) and 0.08 TPY OC, as a rolling, 12-month summation  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B), 3745-17-07(A), 3745-23-06(B) and 3745-21-08(B).

**2. Additional Terms and Conditions**

- 2.a** The hourly limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-3705.

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 maximum annual operating hours for this emissions unit shall not exceed 800, based upon a rolling, 12-month summation of the operating hours.
2. The quality of the fuel oil burned in this emissions unit shall have a sulfur content that is sufficient to comply with the allowable SO2 emission limitation specified in Section A.I above.
3. The permittee shall burn only natural gas, JP-4, JP-8, or kerosene in this emissions unit.

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

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The number of hours of operation.
  - b. The rolling, 12-month summation of the number of hours of operation.
2. For each day during which the permittee burns a fuel other than natural gas, JP-4, JP-8, or kerosene the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
3. For each shipment of oil received for burning in this emissions unit, the permittee shall 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 and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. 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 method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.

### **IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month restriction on the number of hours of 800. These quarterly deviation reports shall be submitted in accordance with Section A.1.c. of the General Terms and Conditions.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, JP-4, JP-8, or kerosene was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director, in writing, of any record that shows a deviation of the allowable sulfur dioxide emission limitation, as shown by 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 Director within 45 days after the deviation occurs.

### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

## V. Testing Requirements (continued)

- 1.a** Emission Limitation -  
0.020 pound of PE per mmBtu actual heat input

Applicable Compliance Method -

For the use of natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu ft, based AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

For the use of an alternative fuel (JP-4, JP-8, or kerosene), compliance may be determined by multiplying the maximum fuel usage rate of the emissions unit (383 gallons/hour) by the emission factor of 2 lbs PE/1000 gallons, based on AP-42, Chapter 1.3-1 (revised 9/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- 1.b** Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 1.c** Emission Limitation -  
0.44 TPY PE, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance with the rolling, 12-month number of hours of operation of 800 and with the limitation of 0.020 lb PE/mmBtu are maintained, compliance with the rolling, 12-month PE limitation above shall be ensured (the annual limitation was developed by multiplying the maximum hourly heat input capacity of the emissions unit (mmBtu/hour) by the PE limitation of 0.020 lb PE/mmBtu, and by the maximum operating schedule of 800 hours/rolling, 12-month period, and then dividing by 2,000 pounds per ton).

- 1.d** Emission Limitation -  
7.66 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (gallons/hour) by the emission factor of 20 lbs NO<sub>x</sub>/1000 gallons, based on AP-42, Chapter 1.3-1 (revised 9/98).

If required, the permittee shall demonstrate compliance with the hourly allowable NO<sub>x</sub> emission limitation in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

- Emission Limitation -  
3.06 TPY NO<sub>x</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance with the rolling, 12-month number of hours of operation of 800 and with the limitation of 7.66 lbs NO<sub>x</sub>/hr are maintained, compliance with the rolling, 12-month NO<sub>x</sub> emission limitation above shall be ensured (the annual limitation was developed by multiplying the allowable NO<sub>x</sub> emission limitation of 7.66 lbs NO<sub>x</sub>/hr by the maximum operating schedule of 800 hours/rolling, 12-month period, and then dividing by 2,000 pounds per ton).

## V. Testing Requirements (continued)

- 1.e** Emission Limitation -  
21.75 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (gallons/hour) by the emission factor of 142(S) lb SO<sub>2</sub>/1000 gallons (where S is the percent sulfur of the fuel used), based on AP-42, Chapter 1.3-1 (revised 9/98).

If required, the permittee shall demonstrate compliance with the hourly allowable SO<sub>2</sub> emission limitation in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

- Emission Limitation -  
8.70 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance with the rolling, 12-month number of hours of operation of 800 and with the limitation of 21.75 lbs SO<sub>2</sub>/hr are maintained, compliance with the rolling, 12-month SO<sub>2</sub> emission limitation above shall be ensured (the annual limitation was developed by multiplying the allowable SO<sub>2</sub> emission limitation of 21.75 lbs SO<sub>2</sub>/hr by the maximum operating schedule of 800 hours/rolling, 12-month period, and then dividing by 2,000 pounds per ton).

- 1.f** Emission Limitation -  
4.48 lbs/hour CO

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 84 lbs CO/mm cu. ft, based on AP-42, Chapter 1.4-1 (revised 2/98).

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

- Emission Limitation -  
1.79 TPY CO, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance with the rolling, 12-month number of hours of operation of 800 and with the limitation of 4.48 lbs CO/hr are maintained, compliance with the rolling, 12-month CO emission limitation above shall be ensured (the annual limitation was developed by multiplying the allowable CO emission limitation of 4.48 lbs CO/hr by the maximum operating schedule of 800 hours/rolling, 12-month period, and then dividing by 2,000 pounds per ton).

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

- 1.g** Emission Limitation -  
0.21 lb/hour OC

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly fuel burning capacity of the emissions unit (gallons/hour) by the emission factor of 0.556 lb OC/1000 gallons, based on AP-42, Chapter 1.3-3 (revised 9/98).

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation in accordance with Methods 1 - 4 and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
0.08 TPY OC, as a rolling, 12-month summation

Applicable Compliance Method -

As long as compliance with the rolling, 12-month number of hours of operation of 800 and with the limitation of 0.21 lb OC/hr are maintained, compliance with the rolling, 12-month OC emission limitation above shall be ensured (the annual limitation was developed by multiplying the allowable OC emission limitation of 0.21 lb OC/hr by the maximum operating schedule of 800 hours/rolling, 12-month period, and then dividing by 2,000 pounds per ton).

- 1.h** Operational Limitation -  
800 hours/year as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements established in section A.III.1 of this permit.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2424 (B315)

**Activity Description:** 66.2 MMBtu high-pressure combustion research facility; F/20018

#### 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>
66.2 mmBtu, high-pressure combustion research facility, Building 20018C (2424)	OAC rule 3745-17-11(B)(4)	0.040 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.
	OAC rule 3745-18-06(F)	0.5 pound of sulfur dioxide (SO <sub>2</sub> ) emissions per mmBtu actual heat input
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.
	OAC rule 3745-31-05(A)(3) PTI 08-4062	350 lbs/week and 1.75 TPY organic compounds (OC);
		2100 lbs/week and 10.5 TPY carbon monoxide (CO);
		1155 lbs/week and 5.78 TPY nitrogen oxides (NO <sub>x</sub> )
	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B), 3745-17-07(A), 3745-23-06(B), 3745-18-06(F) and 3745-21-08(B).	

## **2. Additional Terms and Conditions**

- 2.a** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-4062.

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 quality of fuel 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. For each shipment of oil (jet aviation fuel or diesel fuel) received for burning in this emissions unit, the permittee shall 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 and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. 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 method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.

2. The permittee shall calculate and maintain weekly records of the following information for this emissions unit:
  - a. The name and identification of each fuel burned in this emissions unit.
  - b. The volume, in gallons, of each fuel burned in this emissions unit.
  - c. The OC, CO, and NOx emission rates, in lbs (see calculation methodology in A.V.1.).

## **IV. Reporting Requirements**

1. The permittee shall notify the Director, in writing, of any record that shows a deviation of the allowable sulfur dioxide emission limitation, as shown by 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 Director within 45 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the weekly OC emission limitation of 350 pounds;
  - b. all exceedances of the weekly CO emission limitation of 2100 pounds; and
  - c. all exceedances of the weekly NOx emission limitation of 1155 pounds.

These reports shall be submitted in accordance with Section A.1.c. of the General Terms and Conditions of this permit.

#### **IV. Reporting Requirements (continued)**

- 3.** The permittee shall submit annual reports that summarize the actual annual OC, NO<sub>x</sub>, and CO emissions for this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each.

#### **V. Testing Requirements**

- 1.** Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a** Emission Limitation -  
0.040 pound PE per mmBtu actual heat input

Applicable Compliance Method -

Compliance may be based upon an emission factor of 0.038 lb/mmBtu specified in USEPA reference document, AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.1-1 (revised 10/96).

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

- 1.b** Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 1.c** Emission Limitation -  
0.5 pound sulfur dioxide emissions per mmBtu actual heat input

Applicable Compliance Method -

Compliance shall be based upon the record keeping and analysis requirements specified in section A.III., and the use of the equation contained in OAC rule 3745-18-04(F)(2).

Compliance may also be based upon the emission factor of 1.01(S) lbs SO<sub>2</sub>/mmBtu as specified in AP-42 Chapter 3.1-1 (revised 10/96), multiplied by the sulfur content as a weight percent of the fuel.

If required, the permittee shall demonstrate compliance with the allowable So<sub>2</sub> emission limitation in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

- 1.d** Emission Limitation  
350 lbs/week OC

Applicable Compliance Method

Compliance shall be based upon record keeping as specified in A.III.3. and shall be determined by summing the organic compound emissions from the burning of jet aviation fuel and diesel/hydrocarbon fuels:

- i. The organic compound emissions from jet aviation fuels shall be determined by multiplying the weekly jet fuel usage by the tested emission factor of 16.66 lbs OC/1000 gallons).
- ii. The organic compound emissions from the combustion of diesel and other hydrocarbon fuels shall be determined by multiplying the weekly diesel/hydrocarbon fuel usage by the AP-42 Table 3.1-1 (10-96) emission factor of 0.017 lb OC/mmBtu and by the heat content of the fuel.
- iii. The weekly organic compound emissions shall be the sum of (i) and (ii) above.

**V. Testing Requirements (continued)**

**1.e** Emission Limitation  
1.75 TPY OC

Applicable Compliance Method

Compliance shall be based upon record keeping as specified in A.III.3. and shall be the sum of the weekly organic compound emission rates for the calendar year, divided by 2,000 pounds per ton.

**1.f** Emission Limitation  
2100 lbs/week CO

Applicable Compliance Method

Compliance shall be based upon record keeping as specified in A.III.3. and shall be determined by summing the carbon monoxide emissions from the burning of jet aviation fuel and diesel/hydrocarbon fuels:

- i. The carbon monoxide emissions from jet aviation fuels shall be determined by multiplying the weekly jet fuel usage by the tested emission factor of 100 lbs CO/1000 gallons).
- ii. The carbon monoxide emissions from the combustion of diesel and other hydrocarbon fuels shall be determined by multiplying the weekly diesel/hydrocarbon fuel usage by the AP-42 Table 3.1-1 (10-96) emission factor of 0.048 lb CO/mmBtu and by the heat content of the fuel.
- iii. The weekly carbon monoxide emissions shall be the sum of (i) and (ii) above.

**1.g** Emission Limitation  
10.5 TPY CO

Applicable Compliance Method

Compliance shall be based upon record keeping as specified in A.III.3. and shall be the sum of the weekly carbon monoxide emission rates for the calendar year, divided by 2,000 pounds per ton.

**1.h** Emission Limitation  
1155 lbs/week NO<sub>x</sub>

Applicable Compliance Method

Compliance shall be based upon record keeping as specified in A.III.3. and shall be determined by summing the nitrogen oxide emissions from the burning of jet aviation fuel and diesel/hydrocarbon fuels:

- i. The nitrogen oxide emissions from jet aviation fuels shall be determined by multiplying the weekly jet fuel usage by the tested emission factor of 55 lbs NO<sub>x</sub>/1000 gallons).
- ii. The nitrogen oxide emissions from the combustion of diesel and other hydrocarbon fuels shall be determined by multiplying the weekly diesel/hydrocarbon fuel usage by the AP-42 Table 3.1-1 (10-96) emission factor of 0.698 lb NO<sub>x</sub>/mmBtu and by the heat content of the fuel.
- iii. The weekly nitrogen oxide emissions shall be the sum of (i) and (ii) above.

**1.i** Emission Limitation  
5.78 TPY NO<sub>x</sub>

Applicable Compliance Method

Compliance shall be based upon record keeping as specified in A.III.3. and shall be the sum of the weekly nitrogen oxide emission rates for the calendar year, divided by 2,000 pounds per ton.

## **VI. Miscellaneous Requirements**

1. The permittee shall operate and maintain the existing equipment to monitor and record OC, CO, and NO<sub>x</sub> emissions from this emissions unit in order to develop site-specific emissions factors for diesel and hydrocarbon fuels burned in this emissions unit. Upon determination of site-specific emission factors for the diesel and hydrocarbon fuels, the site-specific factors shall be used in the calculation of emissions.

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2038 (B604)

**Activity Description:** Boiler; 18.3 MMBTU; dual fuel-fired; F/34019

#### 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>
18.3 mmBtu/hour natural gas boiler with No. 1 fuel oil backup; Building 34019 (2038)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule
	OAC rule 3745-18-06(D)	1.6 pounds SO <sub>2</sub> /mmBtu of actual heat input
	OAC rule 3745-31-05(A)(3) PTI 08-179	0.61 TPY PE  7.66 TPY SO <sub>2</sub>
	OAC rules 3745-21-08(B) and 3745-23-06(B)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B), 3745-17-07(A), 3745-18-06(D), 3745-23-06(B) and 3745-21-08(B) .  See A.I.2.a.

##### 2. Additional Terms and Conditions

- The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-179.

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 maximum annual No. 1 fuel oil usage for this emissions unit shall not exceed 431,310 gallons.
2. The permittee shall burn only natural gas and/or number one fuel oil in this emissions unit.
3. The quality of the no. 1 fuel oil burned in this emissions unit shall have a sulfur content that is sufficient to comply with the allowable SO<sub>2</sub> emission limitation specified in Section A.I above.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall calculate and maintain monthly records of the following information for this emissions unit:
  - a. The natural gas, and no. 1 fuel oil usage rates, in mm cu. ft and in gallons, respectively.
  - b. The rolling, 12-month summation of the no. 1 fuel oil usage rates, in gallons.
  - c. The emission rate for PE and SO<sub>2</sub>, in tons, calculated as follows:
    - i. for PE:
      - (a) multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98);
      - (b) multiply the monthly no.1 fuel oil usage rate, from section A.III.1.a above, by the emission factor of 2 lbs PE/1000 gallons, from AP-42, Chapter 1.3-1 (revised 9/98); and
      - (c) sum (a) + (b) above and divide by 2000.
    - ii. for SO<sub>2</sub>:
      - (a) multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98);
      - (b) multiply the monthly no.1 fuel oil usage rate, from section A.III.1.a above, by the emission factor of 71 lbs SO<sub>2</sub>/1000 gallons, from AP-42, Chapter 1.3-1 (revised 9/98); and
      - (c) sum (a) + (b) above and divide by 2000.
2. For each shipment of oil received for burning in this emissions unit, the permittee shall 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 and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. 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 method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.
3. For each day during which the permittee burns a fuel other than natural gas and/or number one fuel 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 submit annual reports that summarize the actual annual fuel oil usage and the PE and SO<sub>2</sub> emissions for the previous calendar year for this emissions unit. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number one fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director, in writing, of any record that shows a deviation of the allowable sulfur dioxide emission limitation, as shown by 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 Director within 45 days after the deviation occurs.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
0.020 pound of PE per mmBtu actual heat input

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

When burning number one fuel oil, compliance may be determined by multiplying the maximum hourly fuel oil burning capacity of the emissions unit (gallons/hour) by the emission factor of 2 lbs PE/1000 gallons, from AP-42, Chapter 1.3-1 (revised 9/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).

- 1.b Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 1.c Emission Limitation -  
0.61 TPY PE

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit and shall be the sum of the monthly PE rates for the calendar year.

- 1.d Emission Limitation -  
7.66 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit and shall be the sum of the monthly SO<sub>2</sub> emission rates for the calendar year.

**V. Testing Requirements (continued)**

**1.e** Operational Limitation -  
431,310 gallons fuel oil/year

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements established in A.III.1 and shall be the sum of the monthly fuel oil usage rates for the calendar year.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2040 (B605)

**Activity Description:** Boiler; 18.3 MMBTU; dual fuel-fired; F/34019

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
18.3 mmBtu/hour natural gas boiler with No. 1 fuel oil backup; Building 34019 (2040)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule
	OAC rule 3745-18-06(D)	1.6 pounds SO <sub>2</sub> /mmBtu of actual heat input
	OAC rule 3745-31-05(A)(3) PTI 08-180	0.61 TPY PE  7.66 TPY SO <sub>2</sub>
	OAC rules 3745-21-08(B) and 3745-23-06(B)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B), 3745-17-07(A), 3745-18-06(D), 3745-23-06(B) and 3745-21-08(B) .  See A.I.2.a.

##### 2. Additional Terms and Conditions

- 2.a The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-180.

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 maximum annual No. 1 fuel oil usage for this emissions unit shall not exceed 431,310 gallons.
2. The permittee shall burn only natural gas and/or number one fuel oil in this emissions unit.
3. The quality of the no. 1 fuel oil burned in this emissions unit shall have a sulfur content that is sufficient to comply with the allowable SO<sub>2</sub> emission limitation specified in Section A.I above.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall calculate and maintain monthly records of the following information for this emissions unit:
  - a. The natural gas, and no. 1 fuel oil usage rates, in mm cu. ft and in gallons, respectively.
  - b. The rolling, 12-month summation of the no. 1 fuel oil usage rates, in gallons.
  - c. The emission rate for PE and SO<sub>2</sub>, in tons, calculated as follows:
    - i. for PE:
      - (a) multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98);
      - (b) multiply the monthly no.1 fuel oil usage rate, from section A.III.1.a above, by the emission factor of 2 lbs PE/1000 gallons, from AP-42, Chapter 1.3-1 (revised 9/98); and
      - (c) sum (a) + (b) above and divide by 2000.
    - ii. for SO<sub>2</sub>:
      - (a) multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98);
      - (b) multiply the monthly no.1 fuel oil usage rate, from section A.III.1.a above, by the emission factor of 71 lbs SO<sub>2</sub>/1000 gallons, from AP-42, Chapter 1.3-1 (revised 9/98); and
      - (c) sum (a) + (b) above and divide by 2000.
2. For each shipment of oil received for burning in this emissions unit, the permittee shall 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 and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. 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 method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.
3. For each day during which the permittee burns a fuel other than natural gas and/or number one fuel 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 submit annual reports that summarize the actual annual fuel oil usage and the PE and SO<sub>2</sub> emissions for the previous calendar year for this emissions unit. These reports shall be submitted by January 31 of each year.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number one fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director, in writing, of any record that shows a deviation of the allowable sulfur dioxide emission limitation, as shown by 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 Director within 45 days after the deviation occurs.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
0.020 pound of PE per mmBtu actual heat input

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

When burning number one fuel oil, compliance may be determined by multiplying the maximum hourly fuel oil burning capacity of the emissions unit (gallons/hour) by the emission factor of 2 lbs PE/1000 gallons, from AP-42, Chapter 1.3-1 (revised 9/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).

- 1.b Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 1.c Emission Limitation -  
0.61 TPY PE

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit and shall be the sum of the monthly PE rates for the calendar year.

- 1.d Emission Limitation -  
7.66 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit and shall be the sum of the monthly SO<sub>2</sub> emission rates for the calendar year.

**V. Testing Requirements (continued)**

**1.e** Operational Limitation -  
431,310 gallons fuel oil/year

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in A.III.1 and shall be the sum of the monthly fuel oil usage rates for the calendar year.

**VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2008 (B606)

**Activity Description:** Boiler (#4); 176 MMBTU; coal-fired; F/31240

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
B606 - 176 mmBtu/hour coal-fired spreader stoker boiler No. 4, with baghouse control, Building 31240 (2008)	40 CFR Part 51, Appendix S OAC rules 3745-31-21 through 3745-31-27	<p>Particulate emissions (PE) shall not exceed 0.10 lb/mmBtu actual heat input;</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 2.0 lbs/mmBtu actual heat input;</p> <p>155 tons PE, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p> <p>2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p>

**Operations, Property,  
and/or Equipment**

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

OAC rule 3745-31-05(A)(3)

The requirements of this rule also include compliance with the requirements of 40 CFR Part 51, Appendix S, OAC rules 3745-31-21 through 3745-31-27, 3745-17-07(A)(1), 3745-23-06(B) and 3745-21-08(B).

17.6 lbs/hour PE

59.14 TPY PE from this emissions unit

352 lbs/hour SO<sub>2</sub>

118.72 TPY SO<sub>2</sub> from this emissions unit

Nitrogen oxides (NO<sub>x</sub>) emissions shall not exceed 0.6 lb/mmBtu actual heat input

250.32 TPY NO<sub>x</sub> from this emissions unit

788 tons NO<sub>x</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

Carbon monoxide (CO) emissions shall not exceed 0.18 lb/mmBtu actual heat input

109.54 TPY CO from this emissions unit

236.34 tons CO, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

OAC rule 3745-17-07(A)(1)

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-10(C)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rule 3745-18-35(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.

**2. Additional Terms and Conditions**

- 2.a** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-1984.

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 quality of coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limit in Section A.I. above.
2. Any two of the emissions units B606, B607 and B608 shall be completely shutdown during the periods from March 15 to May 15 and October 15 to November 15.
3. The maximum allowable total heat input for the three boilers identified as B606, B607, and B608, combined, shall be limited to 443 mmBtu/hour. This total combined heat input of 443 mmBtu/hour corresponds to a coal input rate of 16.4 tons/hr. At no time shall the coal input rate from all three boilers, emissions units B606, B607, and B608, combined, exceed 16.4 tons/hr (as an average over any one-hour period).
4. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 6.5 inches of water while the emissions unit is in operation.

**II. Operational Restrictions (continued)**

5. The maximum annual heat input for emissions units B309, B310, B311, B606, B607, and B608, combined, shall not exceed 2,626,000 mmBtu, as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following final issuance of the PTI, the permittee shall not exceed the heat input levels from emissions units B309, B310, B311, B606, B607, and B608, combined, specified in the following table:

Month(	Maximum Allow Cumulative Heat Input (mmBtu)
	292,000
1 -	584,000
1 -	876,000
1 -	1,168,000
1 -	1,460,000
1 -	1,752,000
1 -	2,044,000
1 -	2,336,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000

After the first 12 calendar months of operation following issuance of the PTI, compliance with the annual heat input limitation for emissions units B309, B310, B311, B606, B607, and B608, combined, shall be based upon a rolling, 12-month summation of the heat inputs.

6. In the event the on-line boiler must be taken off-line, a boiler that was off-line can be brought on-line in its place. The shutdown/startup transition shall not exceed two hours.

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

1. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

2. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The total quantity of coal burned, in tons.
  - b. The average ash content (percent) of the coal burned.
  - c. The average sulfur content (percent) of the coal burned.
  - d. The average heat content of the coal burned, in Btu/pound.
  - e. The average SO<sub>2</sub> emission rate from the coal burned, in lbs SO<sub>2</sub>/mmBtu of actual heat input.
  - f. The total heat input (a x d x 2000), in mmBtu.
  - g. The PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons, calculated as follows;
    - i. for PE, multiply the total heat input, from section A.III.2.f above, by the emission factor of 0.01 lb PE/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - ii. for SO<sub>2</sub>, multiply the total heat input, from section A.III.2.f above, by the emission factor of 1.21 lb SO<sub>2</sub>/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - iii. for NO<sub>x</sub>, multiply the total amount of coal burned, from section A.III.2.a above, by the company-supplied emission factor of 16.0 lbs NO<sub>x</sub>/ton of coal, and divide by 2000; and
    - iv. for CO, multiply the total amount of coal burned, from section A.III.2.a above, by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5.0 lbs CO/ton of coal, and divide by 2000.
3. The permittee shall maintain monthly records of the following information for emissions units B309, B310, B311, B606, B607 and B608, combined:
  - a. The total heat input (summation of the heat input rates for emissions units B309, B310, B311, B606, B607 and B608), in mmBtu.
  - b. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summation of the heat input rates, in mmBtu. Also, for the first 12 calendar months of operation following final issuance of the PTI, the permittee shall record the cumulative heat input rates, in mmBtu, for each calendar month.
  - c. The total PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates (summation of the emission rates for each pollutant for emissions units B309, B310, B311, B606, B607 and B608), in tons.
  - d. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summations of the PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons.

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

4. The permittee shall collect representative grab samples of the coal burned in this emissions unit daily. Each sample shall be collected from the coal conveyor belt. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

5. To obtain an exemption from the visible emissions limitations specified in OAC rule 3745-17-07(A), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the baghouse (a) during all periods of start-up until the baghouse is operational or until the inlet temperature of the baghouse achieves a temperature of three hundred fifty (350) degrees Fahrenheit (b) during all periods of shutdown until the inlet temperature of the baghouse drops below the temperature of three hundred fifty (350) degrees Fahrenheit. An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

6. The permittee shall maintain daily records of the following information in order to determine compliance with the hourly coal input usage rate for emissions units B606, B607 and B608, combined:
  - a. The total quantity of coal burned, in tons.
  - b. The total number of hours of operation.
  - c. The average hourly coal input, in tons/hour (i.e., (a)/(b)).
7. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
8. The length of time (hours) taken for any transition from taking a boiler off-line and starting up another boiler in its place during the specified time periods identified in A.II.2.

#### IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

2. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

3. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
  - a. The total quantity of coal burned (tons).
  - b. The average ash content (percent) of the coal burned.
  - c. The average sulfur content (percent) of the coal burned.
  - d. The average heat content (Btu/pound) of the coal burned.
  - e. The average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the data obtained during the previous calendar quarters.

#### IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:
  - a. All exceedances of the hourly coal input rate of 16.4 tons, and the actual hourly steam flow rate for each such exceedance (for emissions units B606, B607 and B608, combined).
  - b. All periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
  - c. All exceedances of the rolling, 12-month heat input limitation, for emissions units B309, B310, B311, B606, B607, and B608, combined, of 2,626,000, and for the first 12 calendar months of operation following final issuance of this permit, all exceedances of the maximum allowable cumulative combined heat input rates.
  - d. All exceedances of the rolling, 12-month PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission limitations of 155 tons, 2626 tons, 788 tons, and 236.34 tons, respectively (for emissions units B309, B310, B311, B606, B607, and B608, combined).

These reports shall be submitted in accordance with Section A.1.c. of the General Terms and Conditions.
5. The permittee shall submit annual reports that summarize the actual annual PE, NO<sub>x</sub>, SO<sub>2</sub> and CO emissions for this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each.
6. The permittee shall submit quarterly summary reports that identify all instances during which the shutdown/transition period for taking a boiler off-line and brining another on-line exceeded the 2-hour restriction.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.10 lb PE/mmBtu actual heat input  
  
Applicable Compliance Method -  
The permittee shall demonstrate compliance with the PE limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - b. Emission Limitation -  
2.0 lbs sulfur dioxide/mmBtu actual heat input  
  
Applicable Compliance Method -  
The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A. Compliance shall also be based upon the record keeping requirements specified in A.III.2. and the use of the equation contained in OAC rule 3745-18-04(F).
  - c. Emission Limitation -  
155 tons PE, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined  
  
Applicable Compliance Method -  
Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable PE limitation of 0.1 lb PE/mmBtu are maintained, compliance with the rolling, 12-month PE limitation above shall be ensured.

**V. Testing Requirements (continued)**

d. Emission Limitation -

2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable SO<sub>2</sub> emission limitation of 2.0 lbs SO<sub>2</sub>/mmBtu are maintained, compliance with the rolling, 12-month SO<sub>2</sub> emission limitation above shall be ensured.

e. Emission Limitation -

17.6 lbs/hour PE

Applicable Compliance Method -

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

f. Emission Limitation -

59.14 TPY PE

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

g. Emission Limitation -

352 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

h. Emission Limitation -  
1182.72 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

i. Emission Limitation -  
0.6 lb NO<sub>x</sub>/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the facility-tested emission factor of 16 lbs NO<sub>x</sub>/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 7.

j. Emission Limitation -  
350.32 TPY NO<sub>x</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

k. Emission Limitation -  
788 tons NO<sub>x</sub>, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608 combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable NO<sub>x</sub> emission limitation of 0.6 lb NO<sub>x</sub>/mmBtu are maintained, compliance with the rolling, 12-month NO<sub>x</sub> emission limitation above shall be ensured.

l. Emission Limitation -  
0.18 lb CO/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5 lbs CO/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 10.

m. Emission Limitation -  
109.54 TPY CO

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

## V. Testing Requirements (continued)

n. Emission Limitation -

236.34 tons CO, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable CO emission limitation of 0.18 lb CO/mmBtu are maintained, compliance with the rolling, 12-month CO emission limitation above shall be ensured.

o. Emission Limitation -

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted by February 2003 and every three years thereafter.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rates for PE and SO<sub>2</sub>.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. for PE, Methods 1 - 5 of 40 CFR, Part 60, Appendix A.; and
    - ii. for SO<sub>2</sub>, Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.
- Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2012 (B607)

**Activity Description:** Boiler (#5); 176 MMBTU; coal-fired; F/31240

**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>
B607 - 176 mmBtu/hour coal-fired spreader stoker boiler No. 5, with baghouse control, Building 31240 (2012)	40 CFR Part 51, Appendix S OAC rules 3745-31-21 through 3745-31-27	<p>Particulate emissions (PE) shall not exceed 0.10 lb/mmBtu actual heat input;</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 2.0 lbs/mmBtu actual heat input;</p> <p>155 tons PE, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p> <p>2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p>

**Operations, Property,  
and/or Equipment**

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

OAC rule 3745-31-05(A)(3)

The requirements of this rule also include compliance with the requirements of 40 CFR Part 51, Appendix S, OAC rules 3745-31-21 through 3745-31-27, 3745-17-07(A)(1), 3745-23-06(B) and 3745-21-08(B).

17.6 lbs/hour PE

59.14 TPY PE from this emissions unit

352 lbs/hour SO<sub>2</sub>

118.72 TPY SO<sub>2</sub> from this emissions unit

Nitrogen oxides (NO<sub>x</sub>) emissions shall not exceed 0.6 lb/mmBtu actual heat input

250.32 TPY NO<sub>x</sub> from this emissions unit

788 tons NO<sub>x</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

Carbon monoxide (CO) emissions shall not exceed 0.18 lb/mmBtu actual heat input

109.54 TPY CO from this emissions unit

236.34 tons CO, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

OAC rule 3745-17-07(A)(1)

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-10(C)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rule 3745-18-35(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.

## 2. Additional Terms and Conditions

- 2.a** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-1984.

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 quality of coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limit in Section A.I. above.
2. Any two of the emissions units B606, B607 and B608 shall be completely shutdown during the periods from March 15 to May 15 and October 15 to November 15.
3. The maximum allowable total heat input for the three boilers identified as B606, B607, and B608, combined, shall be limited to 443 mmBtu/hour. This total combined heat input of 443 mmBtu/hour corresponds to a coal input rate of 16.4 tons/hr. At no time shall the coal input rate from all three boilers, emissions units B606, B607, and B608, combined, exceed 16.4 tons/hr (as an average over any one-hour period).
4. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 6.5 inches of water while the emissions unit is in operation.

## II. Operational Restrictions (continued)

5. The maximum annual heat input for emissions units B309, B310, B311, B606, B607, and B608, combined, shall not exceed 2,626,000 mmBtu, as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following final issuance of the PTI, the permittee shall not exceed the heat input levels from emissions units B309, B310, B311, B606, B607, and B608, combined, specified in the following table:

Month(	Maximum Allow Cumulative Heat Input (mmBtu)
	292,000
1 -	584,000
1 -	876,000
1 -	1,168,000
1 -	1,460,000
1 -	1,752,000
1 -	2,044,000
1 -	2,336,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000

After the first 12 calendar months of operation following issuance of the PTI, compliance with the annual heat input limitation for emissions units B309, B310, B311, B606, B607, and B608, combined, shall be based upon a rolling, 12-month summation of the heat inputs.

6. In the event the on-line boiler must be taken off-line, a boiler that was off-line can be brought on-line in its place. The shutdown/startup transition shall not exceed two hours.

## III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

2. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The total quantity of coal burned, in tons.
  - b. The average ash content (percent) of the coal burned.
  - c. The average sulfur content (percent) of the coal burned.
  - d. The average heat content of the coal burned, in Btu/pound.
  - e. The average SO<sub>2</sub> emission rate from the coal burned, in lbs SO<sub>2</sub>/mmBtu of actual heat input.
  - f. The total heat input (a x d x 2000), in mmBtu.
  - g. The PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons, calculated as follows;
    - i. for PE, multiply the total heat input, from section A.III.2.f above, by the emission factor of 0.01 lb PE/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - ii. for SO<sub>2</sub>, multiply the total heat input, from section A.III.2.f above, by the emission factor of 1.21 lb SO<sub>2</sub>/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - iii. for NO<sub>x</sub>, multiply the total amount of coal burned, from section A.III.2.a above, by the company-supplied emission factor of 16.0 lbs NO<sub>x</sub>/ton of coal, and divide by 2000; and
    - iv. for CO, multiply the total amount of coal burned, from section A.III.2.a above, by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5.0 lbs CO/ton of coal, and divide by 2000.
3. The permittee shall maintain monthly records of the following information for emissions units B309, B310, B311, B606, B607 and B608, combined:
  - a. The total heat input (summation of the heat input rates for emissions units B309, B310, B311, B606, B607 and B608), in mmBtu.
  - b. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summation of the heat input rates, in mmBtu. Also, for the first 12 calendar months of operation following final issuance of the PTI, the permittee shall record the cumulative heat input rates, in mmBtu, for each calendar month.
  - c. The total PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates (summation of the emission rates for each pollutant for emissions units B309, B310, B311, B606, B607 and B608), in tons.
  - d. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summations of the PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons.

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

4. The permittee shall collect representative grab samples of the coal burned in this emissions unit daily. Each sample shall be collected from the coal conveyor belt. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

5. To obtain an exemption from the visible emissions limitations specified in OAC rule 3745-17-07(A), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the baghouse (a) during all periods of start-up until the baghouse is operational or until the inlet temperature of the baghouse achieves a temperature of three hundred fifty (350) degrees Fahrenheit (b) during all periods of shutdown until the inlet temperature of the baghouse drops below the temperature of three hundred fifty (350) degrees Fahrenheit. An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

6. The permittee shall maintain daily records of the following information in order to determine compliance with the hourly coal input usage rate for emissions units B606, B607 and B608, combined:
  - a. The total quantity of coal burned, in tons.
  - b. The total number of hours of operation.
  - c. The average hourly coal input, in tons/hour (i.e., (a)/(b)).
7. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
8. The length of time (hours) taken for any transition from taking a boiler off-line and starting up another boiler in its place during the specified time periods identified in A.II.2.

#### IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

2. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

3. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
  - a. The total quantity of coal burned (tons).
  - b. The average ash content (percent) of the coal burned.
  - c. The average sulfur content (percent) of the coal burned.
  - d. The average heat content (Btu/pound) of the coal burned.
  - e. The average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the data obtained during the previous calendar quarters.

#### IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:
  - a. All exceedances of the hourly coal input rate of 16.4 tons, and the actual hourly steam flow rate for each such exceedance (for emissions units B606, B607 and B608, combined).
  - b. All periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
  - c. All exceedances of the rolling, 12-month heat input limitation, for emissions units B309, B310, B311, B606, B607, and B608, combined, of 2,626,000, and for the first 12 calendar months of operation following final issuance of this permit, all exceedances of the maximum allowable cumulative combined heat input rates.
  - d. All exceedances of the rolling, 12-month PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission limitations of 155 tons, 2626 tons, 788 tons, and 236.34 tons, respectively (for emissions units B309, B310, B311, B606, B607, and B608, combined).

These reports shall be submitted in accordance with Section A.1.c. of the General Terms and Conditions.
5. The permittee shall submit annual reports that summarize the actual annual PE, NO<sub>x</sub>, SO<sub>2</sub> and CO emissions for this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each.
6. The permittee shall submit quarterly summary reports that identify all instances during which the shutdown/transition period for taking a boiler off-line and bringing another on-line exceeded the 2-hour restriction.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.10 lb PE/mmBtu actual heat input  
  
Applicable Compliance Method -  
The permittee shall demonstrate compliance with the PE limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - b. Emission Limitation -  
2.0 lbs sulfur dioxide/mmBtu actual heat input  
  
Applicable Compliance Method -  
The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A. Compliance shall also be based upon the record keeping requirements specified in A.III.2. and the use of the equation contained in OAC rule 3745-18-04(F).
  - c. Emission Limitation -  
155 tons PE, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined  
  
Applicable Compliance Method -  
Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable PE limitation of 0.1 lb PE/mmBtu are maintained, compliance with the rolling, 12-month PE limitation above shall be ensured.

**V. Testing Requirements (continued)**

d. Emission Limitation -

2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable SO<sub>2</sub> emission limitation of 2.0 lbs SO<sub>2</sub>/mmBtu are maintained, compliance with the rolling, 12-month SO<sub>2</sub> emission limitation above shall be ensured.

e. Emission Limitation -

17.6 lbs/hour PE

Applicable Compliance Method -

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

f. Emission Limitation -

59.14 TPY PE

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

g. Emission Limitation -

352 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

h. Emission Limitation -  
1182.72 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

i. Emission Limitation -  
0.6 lb NO<sub>x</sub>/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the facility-tested emission factor of 16 lbs NO<sub>x</sub>/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 7.

j. Emission Limitation -  
350.32 TPY NO<sub>x</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

k. Emission Limitation -  
788 tons NO<sub>x</sub>, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608 combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable NO<sub>x</sub> emission limitation of 0.6 lb NO<sub>x</sub>/mmBtu are maintained, compliance with the rolling, 12-month NO<sub>x</sub> emission limitation above shall be ensured.

l. Emission Limitation -  
0.18 lb CO/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5 lbs CO/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 10.

m. Emission Limitation -  
109.54 TPY CO

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

## V. Testing Requirements (continued)

n. Emission Limitation -

236.34 tons CO, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable CO emission limitation of 0.18 lb CO/mmBtu are maintained, compliance with the rolling, 12-month CO emission limitation above shall be ensured.

o. Emission Limitation -

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted by February 2003 and every three years thereafter.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rates for PE and SO<sub>2</sub>.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. for PE, Methods 1 - 5 of 40 CFR, Part 60, Appendix A.; and
    - ii. for SO<sub>2</sub>, Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.
- Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2016 (B608)

**Activity Description:** Boiler (#6); 176 MMBTU; coal-fired; F/31240

#### 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>
B608 - 176 mmBtu/hour coal-fired spreader stoker boiler No. 6, with baghouse control, Building 31240 (2016)	40 CFR Part 51, Appendix S OAC rules 3745-31-21 through 3745-31-27	<p>Particulate emissions (PE) shall not exceed 0.10 lb/mmBtu actual heat input;</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 2.0 lbs/mmBtu actual heat input;</p> <p>155 tons PE, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p> <p>2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]</p>

**Operations, Property,  
and/or Equipment**

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

OAC rule 3745-31-05(A)(3)

The requirements of this rule also include compliance with the requirements of 40 CFR Part 51, Appendix S, OAC rules 3745-31-21 through 3745-31-27, 3745-17-07(A)(1), 3745-23-06(B) and 3745-21-08(B).

17.6 lbs/hour PE

59.14 TPY PE from this emissions unit

352 lbs/hour SO<sub>2</sub>

118.72 TPY SO<sub>2</sub> from this emissions unit

Nitrogen oxides (NO<sub>x</sub>) emissions shall not exceed 0.6 lb/mmBtu actual heat input

250.32 TPY NO<sub>x</sub> from this emissions unit

788 tons NO<sub>x</sub>, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

Carbon monoxide (CO) emissions shall not exceed 0.18 lb/mmBtu actual heat input

109.54 TPY CO from this emissions unit

236.34 tons CO, as a rolling, 12-month summation from the coal-fired boilers in Buildings 20770 and 31240 [emissions units B309, B310, B311, B606, B607, and B608, combined]

OAC rule 3745-17-07(A)(1)

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-10(C)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rule 3745-18-35(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 51, Appendix S and OAC rules 3745-31-21 through 3745-31-27.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.

**2. Additional Terms and Conditions**

- 2.a** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-1984.

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 quality of coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the allowable emission limit in Section A.I. above.
2. Any two of the emissions units B606, B607 and B608 shall be completely shutdown during the periods from March 15 to May 15 and October 15 to November 15.
3. The maximum allowable total heat input for the three boilers identified as B606, B607, and B608, combined, shall be limited to 443 mmBtu/hour. This total combined heat input of 443 mmBtu/hour corresponds to a coal input rate of 16.4 tons/hr. At no time shall the coal input rate from all three boilers, emissions units B606, B607, and B608, combined, exceed 16.4 tons/hr (as an average over any one-hour period).
4. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 6.5 inches of water while the emissions unit is in operation.

**II. Operational Restrictions (continued)**

5. The maximum annual heat input for emissions units B309, B310, B311, B606, B607, and B608, combined, shall not exceed 2,626,000 mmBtu, as a rolling, 12-month summation.

To ensure enforceability during the first 12 calendar months of operation following final issuance of the PTI, the permittee shall not exceed the heat input levels from emissions units B309, B310, B311, B606, B607, and B608, combined, specified in the following table:

Month(	Maximum Allow Cumulative Heat Input (mmBtu)
	292,000
1 -	584,000
1 -	876,000
1 -	1,168,000
1 -	1,460,000
1 -	1,752,000
1 -	2,044,000
1 -	2,336,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000
1 -	2,626,000

After the first 12 calendar months of operation following issuance of the PTI, compliance with the annual heat input limitation for emissions units B309, B310, B311, B606, B607, and B608, combined, shall be based upon a rolling, 12-month summation of the heat inputs.

6. In the event the on-line boiler must be taken off-line, a boiler that was off-line can be brought on-line in its place. The shutdown/startup transition shall not exceed two hours.

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

1. The permittee shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1. The letter of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

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

2. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The total quantity of coal burned, in tons.
  - b. The average ash content (percent) of the coal burned.
  - c. The average sulfur content (percent) of the coal burned.
  - d. The average heat content of the coal burned, in Btu/pound.
  - e. The average SO<sub>2</sub> emission rate from the coal burned, in lbs SO<sub>2</sub>/mmBtu of actual heat input.
  - f. The total heat input (a x d x 2000), in mmBtu.
  - g. The PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons, calculated as follows;
    - i. for PE, multiply the total heat input, from section A.III.2.f above, by the emission factor of 0.01 lb PE/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - ii. for SO<sub>2</sub>, multiply the total heat input, from section A.III.2.f above, by the emission factor of 1.21 lb SO<sub>2</sub>/mmBtu (based on the results of emission testing conducted on March 21, 2000), and divide by 2000;
    - iii. for NO<sub>x</sub>, multiply the total amount of coal burned, from section A.III.2.a above, by the company-supplied emission factor of 16.0 lbs NO<sub>x</sub>/ton of coal, and divide by 2000; and
    - iv. for CO, multiply the total amount of coal burned, from section A.III.2.a above, by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5.0 lbs CO/ton of coal, and divide by 2000.
3. The permittee shall maintain monthly records of the following information for emissions units B309, B310, B311, B606, B607 and B608, combined:
  - a. The total heat input (summation of the heat input rates for emissions units B309, B310, B311, B606, B607 and B608), in mmBtu.
  - b. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summation of the heat input rates, in mmBtu. Also, for the first 12 calendar months of operation following final issuance of the PTI, the permittee shall record the cumulative heat input rates, in mmBtu, for each calendar month.
  - c. The total PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates (summation of the emission rates for each pollutant for emissions units B309, B310, B311, B606, B607 and B608), in tons.
  - d. Beginning after the first 12 calendar months of operation following final issuance of the PTI, the rolling, 12-month summations of the PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission rates, in tons.

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

4. The permittee shall collect representative grab samples of the coal burned in this emissions unit daily. Each sample shall be collected from the coal conveyor belt. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, all of the grab samples which were collected during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for ash content (percent), sulfur content (percent), and heat content (Btu/pound of coal). The analytical methods for ash content, sulfur content, and heat content shall be: ASTM method D3174, Ash in the Analysis of Coal and Coke; ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

5. To obtain an exemption from the visible emissions limitations specified in OAC rule 3745-17-07(A), the permittee shall operate and maintain a temperature monitor that measures the temperature of the boiler exhaust gases entering the baghouse (a) during all periods of start-up until the baghouse is operational or until the inlet temperature of the baghouse achieves a temperature of three hundred fifty (350) degrees Fahrenheit (b) during all periods of shutdown until the inlet temperature of the baghouse drops below the temperature of three hundred fifty (350) degrees Fahrenheit. An electronic or hardcopy record of the temperatures during periods of start-up and shutdown shall be maintained.

The temperature monitor shall be installed, calibrated, operated, and maintained in accordance with manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the boiler exhaust gases in units of degrees Fahrenheit.

6. The permittee shall maintain daily records of the following information in order to determine compliance with the hourly coal input usage rate for emissions units B606, B607 and B608, combined:
  - a. The total quantity of coal burned, in tons.
  - b. The total number of hours of operation.
  - c. The average hourly coal input, in tons/hour (i.e., (a)/(b)).
7. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
8. The length of time (hours) taken for any transition from taking a boiler off-line and starting up another boiler in its place during the specified time periods identified in A.II.2.

#### IV. Reporting Requirements

1. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

2. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

3. Quarterly reports shall be submitted concerning the quality and quantity of the coal burned in this emissions unit. These reports shall include the following information for the emissions unit for each calendar month during the calendar quarter:
  - a. The total quantity of coal burned (tons).
  - b. The average ash content (percent) of the coal burned.
  - c. The average sulfur content (percent) of the coal burned.
  - d. The average heat content (Btu/pound) of the coal burned.
  - e. The average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal burned.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the data obtained during the previous calendar quarters.

#### IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports which identify the following information:
  - a. All exceedances of the hourly coal input rate of 16.4 tons, and the actual hourly steam flow rate for each such exceedance (for emissions units B606, B607 and B608, combined).
  - b. All periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
  - c. All exceedances of the rolling, 12-month heat input limitation, for emissions units B309, B310, B311, B606, B607, and B608, combined, of 2,626,000, and for the first 12 calendar months of operation following final issuance of this permit, all exceedances of the maximum allowable cumulative combined heat input rates.
  - d. All exceedances of the rolling, 12-month PE, SO<sub>2</sub>, NO<sub>x</sub>, and CO emission limitations of 155 tons, 2626 tons, 788 tons, and 236.34 tons, respectively (for emissions units B309, B310, B311, B606, B607, and B608, combined).

These reports shall be submitted in accordance with Section A.1.c. of the General Terms and Conditions.
5. The permittee shall submit annual reports that summarize the actual annual PE, NO<sub>x</sub>, SO<sub>2</sub> and CO emissions for this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each.
6. The permittee shall submit quarterly summary reports that identify all instances during which the shutdown/transition period for taking a boiler off-line and brining another on-line exceeded the 2-hour restriction.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.10 lb PE/mmBtu actual heat input  
  
Applicable Compliance Method -  
The permittee shall demonstrate compliance with the PE limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.
  - b. Emission Limitation -  
2.0 lbs sulfur dioxide/mmBtu actual heat input  
  
Applicable Compliance Method -  
The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A. Compliance shall also be based upon the record keeping requirements specified in A.III.2. and the use of the equation contained in OAC rule 3745-18-04(F).
  - c. Emission Limitation -  
155 tons PE, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined  
  
Applicable Compliance Method -  
Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable PE limitation of 0.1 lb PE/mmBtu are maintained, compliance with the rolling, 12-month PE limitation above shall be ensured.

**V. Testing Requirements (continued)**

d. Emission Limitation -

2626 tons SO<sub>2</sub>, as a rolling, 12-month summation from B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable SO<sub>2</sub> emission limitation of 2.0 lbs SO<sub>2</sub>/mmBtu are maintained, compliance with the rolling, 12-month SO<sub>2</sub> emission limitation above shall be ensured.

e. Emission Limitation -

17.6 lbs/hour PE

Applicable Compliance Method -

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

f. Emission Limitation -

59.14 TPY PE

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

g. Emission Limitation -

352 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

The permittee shall demonstrate compliance with the SO<sub>2</sub> emission limitation above based on the results of the emission testing conducted in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

## V. Testing Requirements (continued)

h. Emission Limitation -  
1182.72 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

i. Emission Limitation -  
0.6 lb NO<sub>x</sub>/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the facility-tested emission factor of 16 lbs NO<sub>x</sub>/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 7.

j. Emission Limitation -  
350.32 TPY NO<sub>x</sub>

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

k. Emission Limitation -  
788 tons NO<sub>x</sub>, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608 combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable NO<sub>x</sub> emission limitation of 0.6 lb NO<sub>x</sub>/mmBtu are maintained, compliance with the rolling, 12-month NO<sub>x</sub> emission limitation above shall be ensured.

l. Emission Limitation -  
0.18 lb CO/mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly coal burning capacity (tons/hr) by the AP-42, Table 1.1-3 (revised 9/98) emission factor of 5 lbs CO/ton of coal, and then dividing by the maximum allowable hourly heat input capacity of the boiler (169 mmBtu/hour).

If required, compliance shall be demonstrated through stack testing in accordance with 40 CFR, Part 60, Appendix A, USEPA Methods 1 - 4 and 10.

m. Emission Limitation -  
109.54 TPY CO

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly emission rates for the calendar year.

## V. Testing Requirements (continued)

n. Emission Limitation -

236.34 tons CO, as a rolling, 12-month summation from emissions units B309, B310, B311, B606, B607, and B608, combined

Applicable Compliance Method -

Compliance shall be demonstrated based on the record keeping requirements established in section A.III of this permit.

Also, as long as compliance with the rolling, 12-month heat input restriction of 2,626,000 mmBtu (for emissions units B309, B310, B311, B606, B607 and B608, combined) and with the allowable CO emission limitation of 0.18 lb CO/mmBtu are maintained, compliance with the rolling, 12-month CO emission limitation above shall be ensured.

o. Emission Limitation -

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method -

Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted by February 2003 and every three years thereafter.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rates for PE and SO<sub>2</sub>.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s):
    - i. for PE, Methods 1 - 5 of 40 CFR, Part 60, Appendix A.; and
    - ii. for SO<sub>2</sub>, Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.
- Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

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

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2772 (B609)

**Activity Description:** Boiler (#3); 99.8 MMBTU; natural gas-fired; F/31240

#### 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>
99.8 mmBtu/hour natural gas-fired boiler No. 3, with low NOx burners, Building 31240 (2772)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule
	OAC rule 3745-31-05 PTI 08-3441	2 lbs/hour PE and 5.54 TPY PE as a rolling, 12-month summation;
		0.12 lb NOx/mmBtu
		11.98 lb NOx/hour nitrogen oxides (NOx) and 33.2 TPY NOx as a rolling, 12-month summation;
		0.056 lb/hour sulfur dioxide (SO2) and 0.15 TPY SO2 as a rolling, 12-month summation;
		7.81 lbs/hour carbon monoxide (CO) and 21.66 TPY CO as a rolling, 12-month summation;
		0.54 lb/hour organic compounds (OC) and 1.50 TPY OC as a rolling, 12-month summation
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B), 3745-17-07(A), 3745-23-06(B) and 3745-21-08(B) and 40 CFR, Part 60, Subpart Dc.
		NSPS 40 CFR Part 60, Subpart Dc

**Operations, Property,  
and/or Equipment**

**Applicable Rules/  
Requirements**

**Applicable Emissions  
Limitations/Control  
Measures**

OAC rules 3745-21-08(B) and  
3745-23-06(B)

See A.I.2.c.

**2. Additional Terms and Conditions**

- 2.a** The hourly limitations were developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b** There are no SO<sub>2</sub> emission limitations established by Chapter 3745-18-06 for this emissions unit because natural gas is the only fuel burned in the emissions unit.
- 2.c** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-3441.

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 maximum annual natural gas usage for this emissions unit shall not exceed 515.6 mm cu. ft, based upon a rolling, 12-month summation of the monthly natural gas usage rates.
- 2.** The permittee shall burn only natural gas in this emissions unit.

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

1. The permittee shall calculate and maintain monthly records of the following information for this emissions unit:
  - a. The natural gas usage rate, in mm cu. ft.
  - b. The rolling, 12-month summation of the natural gas usage rates, in mm cu. ft.
  - c. The monthly emission rate for each pollutant (PE, NO<sub>x</sub>, SO<sub>2</sub>, CO, and OC), in pounds, calculated as follows:
    - i. for PE, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98);
    - ii. for NO<sub>x</sub>, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft, from AP-42, Chapter 1.4-1 (revised 2/98);
    - iii. for SO<sub>2</sub>, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98);
    - iv. for CO, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 84 lbs CO/mm cu ft, from AP-42, Chapter 1.4-1 (revised 2/98); and
    - v. for OC, multiply the monthly natural gas usage rate, from section A.III.1.a above, by the emission factor of 5.5 lbs OC/mm cu ft, from AP-42, Chapter 1.4-2 (revised 7/98).
  - d. The rolling, 12-month summation of the emission rates of each pollutant (PE, NO<sub>x</sub>, SO<sub>2</sub>, CO, and OC), in tons.
2. For each day during which the permittee burns a fuel other than natural gas, 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 submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations of 5.54 tons, 33.2 tons, 0.15 ton, 21.66 tons and 1.50 tons (for PE, NO<sub>x</sub>, SO<sub>2</sub>, CO and OC, respectively) and the rolling, 12-month natural gas usage restriction of 515.6 mm cu. ft. These reports shall be due by the dates specified in Part 1 - General Terms and Conditions of this permit under section (A)(1).
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

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

- 1.a** Emission Limitation -  
0.020 pound PE per mmBtu actual heat input

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).

- 1.b** Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 1.c** Emission Limitation -  
2.0 lbs/hour PE

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98).

If required, compliance with the limitation above shall be demonstrated in accordance with Methods 1 - 5 of 40 CFR, APart 60, Appendix A.

Emission Limitation -  
5.54 tons PE/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

**V. Testing Requirements (continued)**

- 1.d** Emission Limitation -  
11.98 lbs/hour NO<sub>x</sub>  
0.12 lb NO<sub>x</sub>/mmBtu of actual heat input

Applicable Compliance Method -

Compliance with the hourly NO<sub>x</sub> emission limitation may be determined by multiplying the emission factor for natural gas (100 lbs NO<sub>x</sub>/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

Compliance with the lb NO<sub>x</sub>/mmBtu emission limitation may be determined by multiplying the emission factor for natural gas (100 lbs NO<sub>x</sub>/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit, and then dividing by the maximum heat input (mmBtu/hr)

If required, the permittee shall demonstrate compliance with the hourly allowable NO<sub>x</sub> emission limitation in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

- Emission Limitation -  
33.2 tons NO<sub>x</sub>/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

- 1.e** Emission Limitation -  
0.056 lb/hour SO<sub>2</sub>

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (0.6 lb SO<sub>2</sub>/mm cu. ft), from AP-42, Chapter 1.4-2 (revised 7/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable SO<sub>2</sub> emission limitation in accordance with Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

- Emission Limitation -  
0.15 ton SO<sub>2</sub>/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

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

- 1.f** Emission Limitation -  
7.81 lbs/hour CO

Applicable Compliance Method -

Compliance may be determined by multiplying the emission factor for natural gas (84 lbs CO/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

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

Emission Limitation -  
21.66 tons CO/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

- 1.g** Emission Limitation -  
0.54 lb/hour OC

Applicable Compliance Method -

Compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu ft/hour) by the emission factor of 5.5 lbs OC/mm cu ft, from AP-42, Chapter 1.4-2 (revised 7/98).

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation in accordance with Methods 1 - 4 and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
1.50 tons OC/rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

- 1.h** Emission Limitation -  
515.6 mm cu. ft natural gas usage, as a rolling 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements specified in A.III.1 of this permit.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2768 (B657)

**Activity Description:** Mobile boiler #4; 13.43 MMBTU; dual fuel-fired; F/30170

#### 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>
13.43 mmBtu/hour natural gas boiler with No. 1 fuel oil backup; Building 10170 (2768)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.
	OAC rule 3745-31-05(D) PTI 08-3483	0.3 lb sulfur dioxide (SO <sub>2</sub> )/mmBtu actual heat input;
	NSPS 40 CFR Part 60, Subpart Dc	12.19 TPY SO <sub>2</sub> as a rolling, 12-month summation; See A.II.1., A.III.1., A.III.2., and A.IV.1.
	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) PTI 08-3483	0.27 lb/hour and 0.82 TPY PE;  1.95 lbs/hour and 5.89 TPY nitrogen oxides (NOx);  1.09 lbs/hour and 3.31 TPY carbon monoxide (CO);  0.076 lb/hour and 0.23 TPY organic compounds (OC)  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B), 3745-17-07(A), 3745-23-06(B), 3745-31-05(D) and 3745-21-08(B) and 40 CFR, Part 60, Subpart Dc.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.

**2. Additional Terms and Conditions**

- 2.a** The hourly limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-3483.

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 permittee shall burn only natural gas and/or number one fuel oil in this emissions unit.
- 2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.3%, by weight.
- 3. The quality of the no. 1 fuel oil burned in this emissions unit shall have a sulfur content that is sufficient to comply with the allowable SO2 emission limitation specified in Section A.I above.

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

- 1. For each day during which the permittee burns a fuel other than natural gas and/or number one fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

2. For each shipment of oil received for burning in this emissions unit, the permittee shall 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 and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. 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 method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.

3. The permittee shall calculate and maintain monthly records of the following information for this emissions unit:
- a. the quantity of natural gas (in mm cu ft) and fuel oil (in gallons) burned;
  - b. the SO<sub>2</sub> emissions, in tons, calculated as follows:
    - i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu ft, as specified in AP-42 Chapter 1.4-2 (revised 7/98);
    - ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 71 lbs SO<sub>2</sub>/1000 gallons, as specified in AP-42 Chapter 1.3-1 (revised 9/98); and
    - iii. sum (i) and (ii), and divide by 2,000.
  - c. the rolling, 12-month SO<sub>2</sub> emissions, in tons;
  - d. the PE, in tons, calculated as follows:
    - i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 1.9 lbs PE/mm cu ft, as specified in AP-42 Chapter 1.4-2 (revised 7/98);
    - ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 2 lbs PE/1000 gallons, as specified in AP-42 Chapter 1.3-1 (revised 9/98); and
    - iii. sum (i) and (ii), and divide by 2,000.

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

e. the NO<sub>x</sub> emissions, in tons, calculated as follows:

i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 100 lbs NO<sub>x</sub>/mm cu ft, as specified in AP-42 Chapter 1.4-2 (revised 7/98);

ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 20 lbs NO<sub>x</sub>/1000 gallons, as specified in AP-42 Chapter 1.3-1 (revised 9/98); and

iii. sum (i) and (ii), and divide by 2,000.

f. the CO emissions, in tons, calculated as follows;

i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 84 lbs CO/mm cu ft, as specified in AP-42 Chapter 1.4-2 (revised 7/98);

ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 5 lbs CO/1000 gallons, as specified in AP-42 Chapter 1.3-1 (revised 9/98); and

iii. sum (i) and (ii), and divide by 2,000.

g. the OC emissions, in tons, calculated as follows:

i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 5.5 lbs OC/mm cu ft, as specified in AP-42 Chapter 1.4-2 (revised 7/98);

ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 0.556 lb OC/1000 gallons, as specified in AP-42 Chapter 1.3-1 (revised 9/98); and

iii. sum (i) and (ii), and divide by 2,000.

### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number one fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit quarterly reports of the fuel supplier certification to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the following:

a. the name of the supplier; and

b. a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c which states that distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils".

c. if no fuel oil is burned in this emissions unit during the calendar quarter, a statement to that effect shall be submitted.

These reports shall be submitted by January 31, April 30, July 31, and October 31 and shall cover the previous three calendar months.

3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the fuel sulfur content of 0.3%, by weight, and the rolling, 12-month SO<sub>2</sub> emission limitation of 12.19 tons. These reports shall be submitted in accordance with paragraph A.1.c. of the General Terms and Conditions.

#### **IV. Reporting Requirements (continued)**

4. The permittee shall notify the Director (Ohio EPA, Southwest District Office), in writing, of any record that shows a deviation of the allowable sulfur dioxide emission limitation, as shown by the calculated sulfur dioxide emission rates from sections A.III above. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Southwest District Office) within 45 days after the deviation occurs.
5. The permittee shall submit annual reports that summarize the actual annual PE, SO<sub>2</sub>, NO<sub>x</sub>, CO and OC emissions for the previous calendar year for this emissions unit. These reports shall be submitted by January 31 of each year.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
0.020 pound of PE per mmBtu actual heat input  
  
Applicable Compliance Method -  
When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
When burning number one fuel oil, compliance may be determined by multiplying the maximum hourly fuel oil burning capacity of the emissions unit (gallons/hour) by the emission factor of 2 lbs PE/1000 gallons, from AP-42, Chapter 1.3-1 (revised 9/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).
  - 1.b Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.
  - 1.c Emission Limitation -  
0.3 lb SO<sub>2</sub>/mmBtu actual heat input  
  
Applicable Compliance Method -  
When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (1.9 lbs PE/mm cu ft), from AP-42, Chapter 1.4-2 (7/98), by the maximum hourly gas burning capacity (mm cu ft/hour) of the emissions unit and dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (2 lbs PE/1000 gallons), from AP-42, Chapter 1.3-1 (9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit and dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
If required, compliance with the limitation above shall be demonstrated in accordance with Methods 1 - 5 of 40 CFR, APart 60, Appendix A.

**V. Testing Requirements (continued)**

**1.d** Emission Limitation -  
12.19 TPY SO<sub>2</sub> as a rolling, 12-month summation

Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements established in section A.III of this permit.

**1.e** Emission Limitation -  
0.27 lb/hour PE

Applicable Compliance Method -  
When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98).

When burning number one fuel oil, compliance may be determined by multiplying the maximum hourly fuel oil burning capacity of the emissions unit (gallons/hour) by the emission factor of 2 lbs PE/1000 gallons, from AP-42, Chapter 1.3-1 (revised 9/98).

If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).

Emission Limitation -  
0.82 TPY PE

Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

**1.f** Emission Limitation -  
1.95 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -  
When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (100 lbs NO<sub>x</sub>/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (20 lbs NO<sub>x</sub>/1000 gallons), from AP-42, Chapter 1.3-1 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable NO<sub>x</sub> emission limitation in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

Emission Limitation -  
5.89 TPY NO<sub>x</sub>

Applicable Compliance Method -  
Compliance shall be based upon the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly NO<sub>x</sub> emission rates for the calendar year.

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

- 1.g** Emission Limitation -  
1.09 lbs/hour CO

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (84 lbs CO/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (5 lbs CO/1000 gallons), from AP-42, Chapter 1.3-1 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

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

- Emission Limitation -  
3.31 TPY CO

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly NOx emission rates for the calendar year.

- 1.h** Emission Limitation -  
0.076 lb/hour OC

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (5.5 lbs OC/mm cu ft), from AP-42, Chapter 1.4-2 (revised 7/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (0.556 lb OC/1000 gallons), from AP-42, Chapter 1.3-3 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation in accordance with Methods 1 - 4 and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

- Emission Limitation -  
0.23 TPY OC

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly NOx emission rates for the calendar year.

- 1.i** Operational Limitation -  
fuel sulfur content of 0.3% by weight

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 5524 (B660)

**Activity Description:** Boiler; 18.75 MMBtu; dual fuel-fired; F/34019

#### 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>
18.75 mmBtu/hour natural gas and No. 1 fuel oil boiler with low NOx burner; Building 34019 (5524)	OAC rule 3745-17-10(B)(1)	0.020 pound of particulate emissions (PE) per mmBtu actual heat input
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.
	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05.
	NSPS 40 CFR Part 60, Subpart Dc	See A.II.1., A.III.1., A.III.2., and A.IV.1.
	OAC rule 3745-31-05(A)(3) PTI 08-3554	0.38 lb/hour and 1.24 TPY PE;
		2.78 lbs/hour and 8.66 TPY nitrogen oxides (NOx);
		4.93 lbs/hour and 1.65 TPY sulfur dioxides (SO2);
		1.53 lbs/hour and 5.01 TPY carbon monoxide (CO):
	0.11 lb/hour and 0.35 TPY organic compounds (OC)	
	OAC rules 3745-21-08(B) and 3745-23-06(B)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B), 3745-17-07(A), 3745-23-06(B) and 3745-21-08(B) and 40 CFR, Part 60, Subpart Dc.  See A.I.2.b.

## **2. Additional Terms and Conditions**

- 2.a** The hourly limitations were developed for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-3554.

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 permittee shall burn only natural gas and/or number one fuel oil in this emissions unit.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.25%, by weight.
3. The maximum annual fuel oil usage for this emissions unit shall not exceed 91,070 gallons.
4. The maximum annual operating hours for this emissions unit shall not exceed 6,552 hours.

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

1. For each day during which the permittee burns a fuel other than natural gas and/or number one fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. For each shipment of oil received for burning in this emissions unit, the permittee shall 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 and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. 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 method D240 (for heat content) and ASTM method D4294 (for sulfur content)), or equivalent methods as approved by the Director.

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

3. The permittee shall calculate and maintain monthly records of the following information for this emissions unit:
  - a. the quantity of natural gas (in mm cu ft) and fuel oil (in gallons) burned;
  - b. the SO<sub>2</sub> emissions, in tons, calculated as follows:
    - i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu ft, as specified in AP-42 Chapter 1.4-2 (revised 7/98);
    - ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 71 lbs SO<sub>2</sub>/1000 gallons, as specified in AP-42 Chapter 1.3-1 (revised 9/98); and
    - iii. sum (i) and (ii), and divide by 2,000.
  - c. the PE, in tons, calculated as follows:
    - i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 1.9 lbs PE/mm cu ft, as specified in AP-42 Chapter 1.4-2 (revised 7/98);
    - ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 2 lbs PE/1000 gallons, as specified in AP-42 Chapter 1.3-1 (revised 9/98); and
    - iii. sum (i) and (ii), and divide by 2,000.
  - d. the NO<sub>x</sub> emissions, in tons, calculated as follows:
    - i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 100 lbs NO<sub>x</sub>/mm cu ft, as specified in AP-42 Chapter 1.4-2 (revised 7/98);
    - ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 20 lbs NO<sub>x</sub>/1000 gallons, as specified in AP-42 Chapter 1.3-1 (revised 9/98); and
    - iii. sum (i) and (ii), and divide by 2,000.
  - e. the CO emissions, in tons, calculated as follows:
    - i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 84 lbs CO/mm cu ft, as specified in AP-42 Chapter 1.4-2 (revised 7/98);
    - ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 5 lbs CO/1000 gallons, as specified in AP-42 Chapter 1.3-1 (revised 9/98); and
    - iii. sum (i) and (ii), and divide by 2,000.
  - f. the OC emissions, in tons, calculated as follows:
    - i. multiply the total natural gas burned, from section A.III.2.a above, by the emission factor of 5.5 lbs OC/mm cu ft, as specified in AP-42 Chapter 1.4-2 (revised 7/98);
    - ii. multiply the total fuel oil burned, from section A.III.2.a above, by the emission factor of 0.556 lb OC/1000 gallons, as specified in AP-42 Chapter 1.3-1 (revised 9/98); and
    - iii. sum (i) and (ii), and divide by 2,000.
  - g. the number of hours of operation.

#### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or number one fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly reports of the fuel supplier certification to the Director (the appropriate Ohio EPA District Office or local air agency) which specify the following:
  - a. the name of the supplier; and
  - b. a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c which states that distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils".
  - c. if no fuel oil is burned in this emissions unit during the calendar quarter, a statement to that effect shall be submitted.

These reports shall be submitted by January 31, April 30, July 31, and October 31 and shall cover the previous three calendar months.

3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the fuel sulfur content of 0.25%, by weight. These reports shall be submitted in accordance with paragraph A.1.c. of the General Terms and Conditions.
4. The permittee shall notify the Director (Ohio EPA, Southwest District Office), in writing, of any record that shows a deviation of the allowable sulfur dioxide emission limitation, as shown by the calculated sulfur dioxide emission rates from sections A.III above. The notification shall include a copy of such record and shall be sent to the Director (Ohio EPA, Southwest District Office) within 45 days after the deviation occurs.
5. The permittee shall submit annual reports that summarize the actual annual no. 1 fuel oil usage rate and the actual annual PE, SO<sub>2</sub>, NO<sub>x</sub>, CO and OC emission rates for the previous calendar year for this emissions unit. These reports shall be submitted by January 31 of each year.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
0.020 pound of PE per mmBtu actual heat input

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft/hour) by the emission factor of 1.9 lbs PE/mm cu. ft, from AP-42, Chapter 1.4-2 (revised 7/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

When burning number one fuel oil, compliance may be determined by multiplying the maximum hourly fuel oil burning capacity of the emissions unit (gallons/hour) by the emission factor of 2 lbs PE/1000 gallons, from AP-42, Chapter 1.3-1 (revised 9/98), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

If required, compliance with the limitation above shall be demonstrated in accordance with OAC rule 3745-17-03(B)(9).

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

### **1.b** Emission Limitation -

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

### **1.c** Emission Limitation -

0.38 lb/hour PE

#### Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (100 lbs NO<sub>x</sub>/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (20 lbs NO<sub>x</sub>/1000 gallons), from AP-42, Chapter 1.3-1 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable NO<sub>x</sub> emission limitation in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

#### Emission Limitation -

1.24 TPY PE

#### Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

### **1.d** Emission Limitation -

2.78 lbs/hour NO<sub>x</sub>

#### Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (100 lbs NO<sub>x</sub>/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (20 lbs NO<sub>x</sub>/1000 gallons), from AP-42, Chapter 1.3-1 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable NO<sub>x</sub> emission limitation in accordance with Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A.

#### Emission Limitation -

8.66 TPY NO<sub>x</sub>

#### Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly NO<sub>x</sub> emission rates for the calendar year.

## V. Testing Requirements (continued)

**1.e** Emission Limitation -  
4.93 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (1.9 lbs PE/mm cu ft), from AP-42, Chapter 1.4-2 (7/98), by the maximum hourly gas burning capacity (mm cu ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (2 lbs PE/1000 gallons), from AP-42, Chapter 1.3-1 (9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, compliance with the limitation above shall be demonstrated in accordance with Methods 1 - 5 of 40 CFR, APart 60, Appendix A.

Emission Limitation -  
1.65 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly SO<sub>2</sub> emission rates for the calendar year.

**1.f** Emission Limitation -  
1.53 lbs/hour CO

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (84 lbs CO/mm cu ft), from AP-42, Chapter 1.4-1 (revised 2/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (5 lbs CO/1000 gallons), from AP-42, Chapter 1.3-1 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

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

Emission Limitation -  
5.01 TPY CO

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly CO emission rates for the calendar year.

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

- 1.g** Emission Limitation -  
0.11 lb/hour OC

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the emission factor for natural gas (5.5 lbs OC/mm cu ft), from AP-42, Chapter 1.4-2 (revised 7/98), by the maximum hourly gas burning capacity (mm cu. ft/hour) of the emissions unit.

When burning fuel oil, compliance may be determined by multiplying the emission factor for fuel oil (0.556 lb OC/1000 gallons), from AP-42, Chapter 1.3-3 (revised 9/98), by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation in accordance with Methods 1 - 4 and 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

- Emission Limitation -  
0.35 TPY OC

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit and shall be the summation of the 12 monthly OC emission rates for the calendar year.

- 1.h** Emission Limitation -  
91,070 gallons fuel oil/year

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit.

- 1.i** Operational Limitation -  
fuel oil sulfur content of 0.25% by weight

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements established in section A.III of this permit.

## **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>
18.75 mmBtu/hour natural gas and No. 1 fuel oil boiler with low NOx burner; Building 34019 (5524)		

**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:** 2565 (K601)

**Activity Description:** Surface coating; paint spray booth; F/30093

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
aerospace ground equipment paint spray booth, Building 30093 (2565)	OAC rule 3745-31-05(A)(3) PTI 08-2870	less than or equal to 5 gallons/day coating and cleanup usage, combined  95.9 lbs/day and 12.42 TPY volatile organic compounds (VOC), including cleanup  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A).
	OAC rule 3745-17-11(B)(1)	0.551 lb/hour particulate emissions (PE)
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-09(U)(2)(e)(i)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The 95.9 lbs VOC/day limitation was developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

##### II. Operational Restrictions

1. The permittee shall operate the water wash exhaust system whenever this emissions unit is in operation.

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

1. The permittee shall collect and record the following information each day for the paint operation:
  - a. The name and identification number of each coating and cleanup material employed.
  - b. The volume, in gallons, of each coating and cleanup material employed.
  - c. The total volume, in gallons, of all of the coatings and cleanup materials employed.
2. The permittee shall collect and record the following information each month for the purpose of determining annual VOC emissions:
  - a. The VOC content of each cleanup material, in pounds per gallon.
  - b. The VOC content of each coating, as applied, in pounds per gallon.
  - c. The number of gallons of each coating and cleanup material employed.
  - d. The total VOC emissions for all the coatings and cleanup materials employed [summation of (a x c) for all cleanup materials + summation of (b x c) for all coatings], in pounds.
3. The permittee shall maintain daily records that document any time periods when the water wash exhaust system was not in service when the emissions unit was in operation.

### IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the paint operation employed more than the applicable maximum daily coating and cleanup usage limit of 5 gallons. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the water wash exhaust system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the event occurs.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
less than or equal to 5 gallons/day coating and cleanup usage  
  
Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.
  - 1.b Emission Limitation -  
95.9 lbs/day VOC  
  
Applicable Compliance Method -  
Compliance shall be determined by multiplying the maximum daily coating and cleanup materials usage rate by the maximum VOC content of all coatings and cleanup materials employed in this emissions unit.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation -  
12.42 TPY VOC, including cleanup

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in A.III and shall be the sum of the 12 monthly VOC emission rates for the calendar year.

- 1.d** Emission Limitation -  
0.551 lb/hour PE

Applicable Compliance Method -

To determine the actual worst case emissions rate for particulates, the following equation shall be used:

$$E = \text{maximum coating solids usage rate in pounds per hour} \times (1 - TE) \times (1 - CE)$$

$$E = \text{particulate matter emission rate (lbs/hour)}$$

TE = transfer efficiency, which is the ration of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- 1.e** Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 2.** Formulation data or USEPA method 24 shall be employed to measure the VOC content for all coatings and cleanup materials.

## 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>
aerospace ground equipment paint spray booth, Building 30093 (2565)		

**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:** 5174 (K607)

**Activity Description:** Surface coating; paint spray booth; F/30901

#### A. State and Federally Enforceable Section

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
paint spray booth, Building 30901 (5174)	OAC rule 3745-31-05(A)(3) PTI 08-3167	less than or equal to 7 gallons/day coating and cleanup usage, combined  49.6 lbs/day and 7 TPY volatile organic compounds (VOC), including cleanup  The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A).
	OAC rule 3745-17-11(B)(1)	0.551 lb/hour particulate emissions (PE)
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-09(U)(2)(e)(i)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

##### 2. Additional Terms and Conditions

- 2.a The 49.6 lbs VOC/day limitation was developed for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

##### II. Operational Restrictions

1. The permittee shall operate the water wash exhaust system whenever this emissions unit is in operation.

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

1. The permittee shall collect and record the following information each day for the paint operation:
  - a. The name and identification number of each coating and cleanup material employed.
  - b. The volume, in gallons, of each coating and cleanup material employed.
  - c. The total volume, in gallons, of all of the coatings and cleanup materials employed.
2. The permittee shall collect and record the following information each month for the purpose of determining annual VOC emissions:
  - a. The VOC content of each cleanup material, in pounds per gallon.
  - b. The VOC content of each coating, as applied, in pounds per gallon.
  - c. The number of gallons of each coating and cleanup material employed.
  - d. The total VOC emissions for all the coatings and cleanup materials employed [summation of (a x c) for all cleanup materials + summation of (b x c) for all coatings], in pounds.
3. The permittee shall maintain daily records that document any time periods when the water wash exhaust system was not in service when the emissions unit was in operation.

### IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the paint operation employed more than the applicable maximum daily coating and cleanup usage limit of 7 gallons. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.
2. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the water wash exhaust system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the event occurs.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation -  
less than or equal to 7 gallons/day coating and cleanup usage  
  
Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.
  - 1.b Emission Limitation -  
49.6 lbs/day VOC  
  
Applicable Compliance Method -  
Compliance shall be determined by multiplying the maximum daily coating and cleanup materials usage rate by the maximum VOC content of all coatings and cleanup materials employed in this emissions unit.

## V. Testing Requirements (continued)

- 1.c** Emission Limitation -  
7 TPY VOC, including cleanup

Applicable Compliance Method -

Compliance shall be based upon the record keeping specified in A.III and shall be the sum of the 12 monthly VOC emission rates for the calendar year.

- 1.d** Emission Limitation -  
0.551 lb/hour PE

Applicable Compliance Method -

To determine the actual worst case emissions rate for particulates, the following equation shall be used:

$$E = \text{maximum coating solids usage rate in pounds per hour} \times (1 - TE) \times (1 - CE)$$

$$E = \text{particulate matter emission rate (lbs/hour)}$$

TE = transfer efficiency, which is the ration of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- 1.e** Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 2.** Formulation data or USEPA method 24 shall be employed to measure the VOC content for all coatings and cleanup materials.

## 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>
aerospace ground equipment paint spray booth, Building 30093 (2565)		

**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:** 5093 (K608)

**Activity Description:** Fuel cell facility; F/34020

#### 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>
aircraft maintenance paint touch-up, Building 34020 (5093)	OAC rule 3745-21-09(U)(2)(e)(i)	less than or equal to 8 gallons/day coating usage
	OAC rule 3745-17-11(B)(1)	0.551 lb/hour particulate emissions (PE)
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.
	40 CFR Part 63 Subpart GG	See Section A.I.2.
	OAC rule 3745-31-05(A)(3) PTI 08-2815	less than or equal to 40 gallons/month coating and cleanup materials usage, combined
		160 lbs/month volatile organic compounds (VOC) and 1.0 TPY VOC, including cleanup
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A) and 40 CFR, Part 63, Subpart GG.

## 2. Additional Terms and Conditions

### 2.a 63.744(a) - 9/1/95, modified 3/27/98

The permittee shall comply with the requirements below unless the solvent used is classified as a cleaning solvent that contains no organic HAP or VOC as identified in 40 CFR 63.744(b)(1) or the cleaning solvent contains HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations:

#### 63.744(a) - 9/1/95, modified 3/27/98

i. Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.

#### 63.744(a) - 9/1/95, modified 3/27/98

ii. Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.

#### 63.744(a) - 9/1/95

iii. Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.

### 2.b 63.744(b) - 9/1/95 modified 3/27/98

The permittee shall use cleaning solvents for hand-wipe cleaning operation that meet one of the requirements specified below: (Cleaning solvent containing HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations are exempt from these requirements)

i. Meet one of the composition requirements in 40 CFR 63.744(b)(1).

ii. Have a composite vapor pressure of 45 mm Hg (24.1 in. H<sub>2</sub>O) or less at 20 deg. C (68 deg. F).

### 2.c 63.744(c)(1) thru (4) - 9/1/95 modified 3/27/98 - modified 9/1/98, (c)(5) added

The permittee shall use one or more of the techniques, or their equivalent, specified below to clean spray guns. Spray gun cleaning operations using cleaning solvent solutions that contain HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations are exempt from these requirements. Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from these requirements.

#### 63.744(c)(1) - 9/1/95 modified 3/27/98

i. Enclosed system - The permittee shall clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing solvent through the gun. If leaks are found during the monthly inspection, repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.

#### 63.744(c)(2) - 9/1/95 modified 3/27/98

ii. Nonatomized cleaning - The permittee shall clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. The permittee shall direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use.

## 2. Additional Terms and Conditions (continued)

63.744(c)(3) - 9/1/95

iii. Disassembled spray gun cleaning - The permittee shall disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, the permittee shall soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components.

63.744(c)(4) - 9/1/95 modified 3/27/98

iv. Atomizing cleaning - The permittee shall clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions.

**2.d** 63.745(b) - 9/1/95

The permittee shall conduct the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels and piping systems in such a manner that minimizes spills.

**2.e** 63.745(c) - 9/1/95

Organic HAP and VOC content levels - The permittee shall comply with the organic HAP and VOC content limits specified below:

i. Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than 350 g/l (2.9 lb/gal) of primer (less water) as applied.

ii. VOC emissions from primers shall be limited to a VOC content level of no more than 350 g/l (2.9 lb/gal) of primer (less water and exempt solvents) as applied.

iii. Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than 420 g/l (3.5 lb/gal) of coating (less water) as applied. Organic HAP emissions from self-priming topcoats shall be limited to an organic HAP content level of no more than 420 g/l (3.5 lb/gal) of self-priming topcoat (less water) as applied.

iv. VOC emissions from topcoats shall be limited to a VOC content level of no more than 420 g/l (3.5 lb/gal) of coating (less water and exempt solvents) as applied. VOC emissions from self-priming topcoats shall be limited to a VOC content level of no more than 420 g/l (3.5 lb/gal) of self-priming topcoat (less water and exempt solvents) as applied.

**2.f** 63.745(f)(1) - 9/1/95

The permittee shall use brush coating and/or high volume low pressure (HVLP) spraying techniques for the application of all primers and topcoats.

**2.g** 63.745(g)(1) - 9/1/95

Inorganic HAP emissions - The permittee shall apply coatings that contain inorganic HAP in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets.

**2.h** 63.745(g)(2)(i) - 9/1/95 modified 3/27/98, (i) changed to (i)(B)

Inorganic HAP emissions - water wash - The permittee shall control air stream from this operation by passing the air stream through a water wash system that shall remain in operation during all coating application operations before exhausting it to the atmosphere.

**2.i** 63.745(g)(3) - 9/1/95

Inorganic HAP emissions - water wash - If the water path in the water wash system fails the visual continuity / flow characteristics check, or the water flow rate recorded exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures, or the booth manufacturer's or locally prepared maintenance procedures for the water wash system have not been performed as scheduled, shutdown the operation immediately and take corrective action. The operation shall not be resumed until the water flow rate is returned within the specified limit(s).

## **2. Additional Terms and Conditions (continued)**

**2.j** 63.745(g)(4) - 9/1/95

Inorganic HAP emissions - water wash / filter - The requirements of terms A.I.2.g thru i do not apply to the following:

- a. Touch-up of scratched surfaces or damaged paint;
- b. Hole daubing for fasteners;
- c. Touch-up of trimmed edges;
- d. Coating prior to joining dissimilar metal components;
- e. Stencil operations performed by brush or air brush;
- f. Section joining;
- g. Touch-up of bushings and other similar parts;
- h. Sealant detackifying; and
- i. Painting parts in an area identified in a Title V permit, where the permitting authority has determined that it is not technically feasible to paint the parts in a booth. The painting that occurs in this emissions unit is the coating of aircraft in a hangar, it is not technically feasible to paint aircraft in a booth.

**2.k** 63.741(f) - 9/1/95

All priming & Topcoat operations - The requirements of terms A.I.2.d thru i do not apply to the use of specialty coatings, adhesives, adhesive bonding primers, or sealants at aerospace facilities. The requirements of terms A.I.2.d thru i also do not apply to primers, topcoats, and cleaning solvents containing HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations.

**2.l** 63.741(g) - 9/1/95

All priming & Topcoat operations - The requirements of terms A.I.2.d thru i do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 189 l (50 gal), and the combined annual total of all such primers, topcoats, and chemical milling maskants used at a facility does not exceed 757 l (200 gal). Primers and topcoats exempted under A.I.2.k are not included in the 50 and 200 gallon limits.

**2.m** 63.748 - 9/1/95

The permittee shall conduct the handling and transfer of the waste that contains HAP to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.

## **II. Operational Restrictions**

**None**

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

**1.** 63.751(a) - 9/1/95

Enclosed Spray Gun Cleaners - If the permittee employs an enclosed spray gun cleaner shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation.

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

2. 63.752(b) - 9/1/95 - modified 3/27/98  
Cleaning operation - The permittee shall maintain the following information for the cleaning operation, as appropriate:
  - a. The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.
  - b. For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in 40 CFR 63.744(b)(1):
    - i. The name of each cleaning solvent used.
    - ii. All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements.
    - iii. Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.
  - c. For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in 40 CFR 63.744(b)(1), but does comply with the vapor pressure requirement above:
    - i. The name of each cleaning solvent used.
    - ii. The composite vapor pressure of each cleaning solvent used.
    - iii. All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent.
    - iv. The amount (in gallons) of each cleaning solvent used each month at each operation.
  - d. A record of all leaks from enclosed spray gun cleaners identified during the inspection that includes for each leak found:
    - i. Source identification.
    - ii. Date leak was discovered.
    - iii. Date leak was repaired.
3. 63.752(c) - 9/1/95  
Primer & Topcoat - organic HAP and VOC - The permittee shall maintain the following information for the prime coat and topcoat application operations, as appropriate:
  - a. The name and VOC content as received and as applied of each primer and topcoat used at the facility.
  - b. The mass of organic HAP emitted per unit volume of coating as applied (less water) (H) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G) for each coating formulation within each coating category used each month (as calculated using the procedures specified in 63.750(c) and (e)).
  - c. All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H and G above.
  - d. The volume (gal) of each coating formulation within each coating category used each month.
4. The permittee shall collect and record the following information each day for the paint operation:
  - a. The name and identification number of each coating employed.
  - b. The volume, in gallons, of each coating employed.
  - c. The total volume, in gallons, of all of the coatings employed.

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

5. The permittee shall collect and record the following information each month for the paint operation:
  - a. The name and identification of each coating and cleanup material employed.
  - b. The volume, in gallons, of each coating and cleanup material employed.
  - c. The total volume, in gallons, of all coatings and cleanup materials employed.
  - d. The VOC content of each cleanup material, in pounds per gallon.
  - e. The VOC content of each coating, as applied, in pounds per gallon.
  - f. The total VOC emissions from all coatings and cleanup materials employed, in pounds.

### IV. Reporting Requirements

1. 63.753(b) - 9/1/95  
Cleaning operation - The permittee shall submit semi-annual reports occurring every 6 months from the date of the notification of compliance status that identify:
  - a. Any instance where a non-compliant cleaning solvent is used for hand-wipe cleaning operation;
  - b. A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in 40 CFR 63.744(b)(1).
  - c. Any instance where a non-compliant spray gun cleaning method is used.
  - d. Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days.
  - e. If the operations have been in compliance for the semi-annual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.
2. 63.753(c) - 9/1/95  
Primer & Topcoat operations - The permittee shall submit semi-annual reports occurring every 6 months from the date of the notification of compliance status that identify:  
  
63.753(c)(1)(i) - 9/1/95
  - a. Each value of H and G recorded above that exceeds the applicable organic HAP or VOC content limit.  
63.753(c)(1)(vi) - 9/1/95 - water wash only
  - b. All times when a primer or topcoat application operation was not immediately shut down when the water flow rate through a conventional water wash system, or the recommended parameter(s) that indicate the booth performance for pumpless systems, as appropriate, was outside the limit(s) specified by the booth manufacturer or in locally prepared operating procedures.  
63.753(c)(1)(vii) - 9/1/95
  - c. If the operations have been in compliance for the semi-annual period, a statement that the operations have been in compliance with the applicable standards.
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the paint operation employed more than the applicable maximum daily coating usage limit of 8 gallons and any monthly record showing that the paint operation employed more than the applicable maximum coating and cleanup materials suages, combined, of 40 gallons. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

#### **IV. Reporting Requirements (continued)**

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emissions of 160 pounds. These reports shall be due by the dates specified in Part 1 - General Terms and Conditions of this permit under section (A)(1).
5. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
less than or equal to 8 gallons/day coating usage

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.

- 1.b Emission Limitation -  
0.551 lb/hour PE

Applicable Compliance Method -  
To determine the actual worst case emissions rate for particulates, the following equation shall be used:

$$E = \text{maximum coating solids usage rate in pounds per hour} \times (1 - TE) \times (1 - CE)$$

$$E = \text{particulate matter emission rate (lbs/hour)}$$

TE = transfer efficiency, which is the ration of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- 1.c Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 1.d Emission Limitation -  
less than or equal to 40 gallons/month coating and cleanup materials usage

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.

- 1.e Emission Limitation -  
160 lbs/month VOC, including cleanup

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.

**V. Testing Requirements (continued)**

- 1.f** Emission Limitation -  
1.0 TPY VOC, including cleanup

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements established in section A.III of this permit and shall be the sum of the 12 monthly VOC emission rates for the calendar year, divided by 2,000 pounds per ton.

- 2.** Formulation data or USEPA method 24 shall be employed to measure the VOC content for all coatings and cleanup materials.

**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>
aircraft maintenance paint touch-up, Building 34020 (5093)		

**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:** 5092 (K609)

**Activity Description:** Structural repair and corrosion control facility; F/34024

#### 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>
aircraft maintenance paint touch-up, Building 34024 (5092)	OAC rule 3745-21-09(U)(2)(e)(i)	less than or equal to 8 gallons/day coating usage
	OAC rule 3745-17-11(B)(1)	0.551 lb/hour particulate emissions (PE)
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.
	40 CFR Part 63 Subpart GG	See Section A.I.2.
	OAC rule 3745-31-05(A)(3) PTI 08-2815	less than or equal to 40 gallons/month coating and cleanup materials usage, combined
		160 lbs/month volatile organic compounds (VOC) and 1.0 TPY VOC, including cleanup
	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A) and 40 CFR, Part 63, Subpart GG.	

## 2. Additional Terms and Conditions

**2.a** 63.744(a) - 9/1/95, modified 3/27/98

The permittee shall comply with the requirements below unless the solvent used is classified as a cleaning solvent that contains no organic HAP or VOC as identified in 40 CFR 63.744(b)(1) or the cleaning solvent contains HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations:

63.744(a) - 9/1/95, modified 3/27/98

i. Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.

63.744(a) - 9/1/95, modified 3/27/98

ii. Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.

63.744(a) - 9/1/95

iii. Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.

**2.b** 63.744(b) - 9/1/95 modified 3/27/98

The permittee shall use cleaning solvents for hand-wipe cleaning operation that meet one of the requirements specified below: (Cleaning solvent containing HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations are exempt from these requirements)

i. Meet one of the composition requirements in 40 CFR 63.744(b)(1).

ii. Have a composite vapor pressure of 45 mm Hg (24.1 in. H<sub>2</sub>O) or less at 20 deg. C (68 deg. F).

**2.c** 63.744(c)(1) thru (4) - 9/1/95 modified 3/27/98 - modified 9/1/98, (c)(5) added

The permittee shall use one or more of the techniques, or their equivalent, specified below to clean spray guns. Spray gun cleaning operations using cleaning solvent solutions that contain HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations are exempt from these requirements. Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from these requirements.

63.744(c)(1) - 9/1/95 modified 3/27/98

i. Enclosed system - The permittee shall clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing solvent through the gun. If leaks are found during the monthly inspection, repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.

63.744(c)(2) - 9/1/95 modified 3/27/98

ii. Nonatomized cleaning - The permittee shall clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. The permittee shall direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use.

## 2. Additional Terms and Conditions (continued)

63.744(c)(3) - 9/1/95

iii. Disassembled spray gun cleaning - The permittee shall disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, the permittee shall soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components.

63.744(c)(4) - 9/1/95 modified 3/27/98

iv. Atomizing cleaning - The permittee shall clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions.

**2.d** 63.745(b) - 9/1/95

The permittee shall conduct the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels and piping systems in such a manner that minimizes spills.

**2.e** 63.745(c) - 9/1/95

Organic HAP and VOC content levels - The permittee shall comply with the organic HAP and VOC content limits specified below:

i. Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than 350 g/l (2.9 lb/gal) of primer (less water) as applied.

ii. VOC emissions from primers shall be limited to a VOC content level of no more than 350 g/l (2.9 lb/gal) of primer (less water and exempt solvents) as applied.

iii. Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than 420 g/l (3.5 lb/gal) of coating (less water) as applied. Organic HAP emissions from self-priming topcoats shall be limited to an organic HAP content level of no more than 420 g/l (3.5 lb/gal) of self-priming topcoat (less water) as applied.

iv. VOC emissions from topcoats shall be limited to a VOC content level of no more than 420 g/l (3.5 lb/gal) of coating (less water and exempt solvents) as applied. VOC emissions from self-priming topcoats shall be limited to a VOC content level of no more than 420 g/l (3.5 lb/gal) of self-priming topcoat (less water and exempt solvents) as applied.

**2.f** 63.745(f)(1) - 9/1/95

The permittee shall use brush coating and/or high volume low pressure (HVLP) spraying techniques for the application of all primers and topcoats.

**2.g** 63.745(g)(1) - 9/1/95

Inorganic HAP emissions - The permittee shall apply coatings that contain inorganic HAP in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets.

**2.h** 63.745(g)(2)(i) - 9/1/95 modified 3/27/98, (i) changed to (i)(B)

Inorganic HAP emissions - water wash - The permittee shall control air stream from this operation by passing the air stream through a water wash system that shall remain in operation during all coating application operations before exhausting it to the atmosphere.

**2.i** 63.745(g)(3) - 9/1/95

Inorganic HAP emissions - water wash - If the water path in the water wash system fails the visual continuity / flow characteristics check, or the water flow rate recorded exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures, or the booth manufacturer's or locally prepared maintenance procedures for the water wash system have not been performed as scheduled, shutdown the operation immediately and take corrective action. The operation shall not be resumed until the water flow rate is returned within the specified limit(s).

## **2. Additional Terms and Conditions (continued)**

- 2.j** 63.745(g)(4) - 9/1/95  
Inorganic HAP emissions - water wash / filter - The requirements of terms A.I.2.g thru i do not apply to the following:
- a. Touch-up of scratched surfaces or damaged paint;
  - b. Hole daubing for fasteners;
  - c. Touch-up of trimmed edges;
  - d. Coating prior to joining dissimilar metal components;
  - e. Stencil operations performed by brush or air brush;
  - f. Section joining;
  - g. Touch-up of bushings and other similar parts;
  - h. Sealant detackifying; and
  - i. Painting parts in an area identified in a Title V permit, where the permitting authority has determined that it is not technically feasible to paint the parts in a booth. The painting that occurs in this emissions unit is the coating of aircraft in a hangar, it is not technically feasible to paint aircraft in a booth.
- 2.k** 63.741(f) - 9/1/95  
All priming & Topcoat operations - The requirements of terms A.I.2.d thru i do not apply to the use of specialty coatings, adhesives, adhesive bonding primers, or sealants at aerospace facilities. The requirements of terms A.I.2.d thru i also do not apply to primers, topcoats, and cleaning solvents containing HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations.
- 2.l** 63.741(g) - 9/1/95  
All priming & Topcoat operations - The requirements of terms A.I.2.d thru i do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 189 l (50 gal), and the combined annual total of all such primers, topcoats, and chemical milling maskants used at a facility does not exceed 757 l (200 gal). Primers and topcoats exempted under A.I.2.k are not included in the 50 and 200 gallon limits.
- 2.m** 63.748 - 9/1/95  
The permittee shall conduct the handling and transfer of the waste that contains HAP to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.

## **II. Operational Restrictions**

**None**

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

- 1.** 63.751(a) - 9/1/95  
Enclosed Spray Gun Cleaners - If the permittee employs an enclosed spray gun cleaner shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation.

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

2. 63.752(b) - 9/1/95 - modified 3/27/98  
Cleaning operation - The permittee shall maintain the following information for the cleaning operation, as appropriate:
  - a. The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.
  - b. For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in 40 CFR 63.744(b)(1):
    - i. The name of each cleaning solvent used.
    - ii. All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements.
    - iii. Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.
  - c. For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in 40 CFR 63.744(b)(1), but does comply with the vapor pressure requirement above:
    - i. The name of each cleaning solvent used.
    - ii. The composite vapor pressure of each cleaning solvent used.
    - iii. All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent.
    - iv. The amount (in gallons) of each cleaning solvent used each month at each operation.
  - d. A record of all leaks from enclosed spray gun cleaners identified during the inspection that includes for each leak found:
    - i. Source identification.
    - ii. Date leak was discovered.
    - iii. Date leak was repaired.
3. 63.752(c) - 9/1/95  
Primer & Topcoat - organic HAP and VOC - The permittee shall maintain the following information for the prime coat and topcoat application operations, as appropriate:
  - a. The name and VOC content as received and as applied of each primer and topcoat used at the facility.
  - b. The mass of organic HAP emitted per unit volume of coating as applied (less water) (H) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G) for each coating formulation within each coating category used each month (as calculated using the procedures specified in 63.750(c) and (e)).
  - c. All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H and G above.
  - d. The volume (gal) of each coating formulation within each coating category used each month.
4. The permittee shall collect and record the following information each day for the paint operation:
  - a. The name and identification number of each coating employed.
  - b. The volume, in gallons, of each coating employed.
  - c. The total volume, in gallons, of all of the coatings employed.

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

5. The permittee shall collect and record the following information each month for the paint operation:
  - a. The name and identification of each coating and cleanup material employed.
  - b. The volume, in gallons, of each coating and cleanup material employed.
  - c. The total volume, in gallons, of all coatings and cleanup materials employed.
  - d. The VOC content of each cleanup material, in pounds per gallon.
  - e. The VOC content of each coating, as applied, in pounds per gallon.
  - f. The total VOC emissions from all coatings and cleanup materials employed, in pounds.

### IV. Reporting Requirements

1. 63.753(b) - 9/1/95  
Cleaning operation - The permittee shall submit semi-annual reports occurring every 6 months from the date of the notification of compliance status that identify:
  - a. Any instance where a non-compliant cleaning solvent is used for hand-wipe cleaning operation;
  - b. A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in 40 CFR 63.744(b)(1).
  - c. Any instance where a non-compliant spray gun cleaning method is used.
  - d. Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days.
  - e. If the operations have been in compliance for the semi-annual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.
2. 63.753(c) - 9/1/95  
Primer & Topcoat operations - The permittee shall submit semi-annual reports occurring every 6 months from the date of the notification of compliance status that identify:  
  
63.753(c)(1)(i) - 9/1/95
  - a. Each value of H and G recorded above that exceeds the applicable organic HAP or VOC content limit.  
63.753(c)(1)(vi) - 9/1/95 - water wash only
  - b. All times when a primer or topcoat application operation was not immediately shut down when the water flow rate through a conventional water wash system, or the recommended parameter(s) that indicate the booth performance for pumpless systems, as appropriate, was outside the limit(s) specified by the booth manufacturer or in locally prepared operating procedures.  
63.753(c)(1)(vii) - 9/1/95
  - c. If the operations have been in compliance for the semi-annual period, a statement that the operations have been in compliance with the applicable standards.
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the paint operation employed more than the applicable maximum daily coating usage limit of 8 gallons and any monthly record showing that the paint operation employed more than the applicable maximum coating and cleanup materials suages, combined, of 40 gallons. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

#### IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emissions of 160 pounds. These reports shall be due by the dates specified in Part 1 - General Terms and Conditions of this permit under section (A)(1).
5. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
less than or equal to 8 gallons/day coating usage

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.

- 1.b Emission Limitation -  
0.551 lb/hour PE

Applicable Compliance Method -  
To determine the actual worst case emissions rate for particulates, the following equation shall be used:

$$E = \text{maximum coating solids usage rate in pounds per hour} \times (1 - TE) \times (1 - CE)$$

$$E = \text{particulate matter emission rate (lbs/hour)}$$

TE = transfer efficiency, which is the ration of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- 1.c Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 1.d Emission Limitation -  
less than or equal to 40 gallons/month coating and cleanup materials usage

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.

- 1.e Emission Limitation -  
160 lbs/month VOC, including cleanup

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.

**V. Testing Requirements (continued)**

- 1.f** Emission Limitation -  
1.0 TPY VOC, including cleanup

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements established in section A.III of this permit and shall be the sum of the 12 monthly VOC emission rates for the calendar year, divided by 2,000 pounds per ton.

- 2.** Formulation data or USEPA method 24 shall be employed to measure the VOC content for all coatings and cleanup materials.

**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>
aircraft maintenance paint touch-up, Building 34020 (5093)		

**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:** 5210 (K610)

**Activity Description:** Aircraft maintenance and ISO facility; F/34026

#### 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>
aircraft maintenance paint touch-up, Building 34026 (5210)	OAC rule 3745-21-09(U)(2)(e)(i)	less than or equal to 8 gallons/day coating usage
	OAC rule 3745-17-11(B)(1)	0.551 lb/hour particulate emissions (PE)
	OAC rule 3745-17-07(A)	Opacity shall not exceed 20%, as a six-minute average, except as provided by rule.
	40 CFR Part 63 Subpart GG	See Section A.I.2.
	OAC rule 3745-31-05(A)(3) PTI 08-2815	less than or equal to 40 gallons/month coating and cleanup materials usage, combined
		160 lbs/month volatile organic compounds (VOC) and 1.0 TPY VOC, including cleanup
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-17-07(A) and 40 CFR, Part 63, Subpart GG.

## 2. Additional Terms and Conditions

**2.a** 63.744(a) - 9/1/95, modified 3/27/98

The permittee shall comply with the requirements below unless the solvent used is classified as a cleaning solvent that contains no organic HAP or VOC as identified in 40 CFR 63.744(b)(1) or the cleaning solvent contains HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations:

63.744(a) - 9/1/95, modified 3/27/98

i. Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.

63.744(a) - 9/1/95, modified 3/27/98

ii. Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.

63.744(a) - 9/1/95

iii. Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.

**2.b** 63.744(b) - 9/1/95 modified 3/27/98

The permittee shall use cleaning solvents for hand-wipe cleaning operation that meet one of the requirements specified below: (Cleaning solvent containing HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations are exempt from these requirements)

i. Meet one of the composition requirements in 40 CFR 63.744(b)(1).

ii. Have a composite vapor pressure of 45 mm Hg (24.1 in. H<sub>2</sub>O) or less at 20 deg. C (68 deg. F).

**2.c** 63.744(c)(1) thru (4) - 9/1/95 modified 3/27/98 - modified 9/1/98, (c)(5) added

The permittee shall use one or more of the techniques, or their equivalent, specified below to clean spray guns. Spray gun cleaning operations using cleaning solvent solutions that contain HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations are exempt from these requirements. Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from these requirements.

63.744(c)(1) - 9/1/95 modified 3/27/98

i. Enclosed system - The permittee shall clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing solvent through the gun. If leaks are found during the monthly inspection, repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.

63.744(c)(2) - 9/1/95 modified 3/27/98

ii. Nonatomized cleaning - The permittee shall clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. The permittee shall direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use.

## 2. Additional Terms and Conditions (continued)

63.744(c)(3) - 9/1/95

iii. Disassembled spray gun cleaning - The permittee shall disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, the permittee shall soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components.

63.744(c)(4) - 9/1/95 modified 3/27/98

iv. Atomizing cleaning - The permittee shall clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions.

**2.d** 63.745(b) - 9/1/95

The permittee shall conduct the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels and piping systems in such a manner that minimizes spills.

**2.e** 63.745(c) - 9/1/95

Organic HAP and VOC content levels - The permittee shall comply with the organic HAP and VOC content limits specified below:

i. Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than 350 g/l (2.9 lb/gal) of primer (less water) as applied.

ii. VOC emissions from primers shall be limited to a VOC content level of no more than 350 g/l (2.9 lb/gal) of primer (less water and exempt solvents) as applied.

iii. Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than 420 g/l (3.5 lb/gal) of coating (less water) as applied. Organic HAP emissions from self-priming topcoats shall be limited to an organic HAP content level of no more than 420 g/l (3.5 lb/gal) of self-priming topcoat (less water) as applied.

iv. VOC emissions from topcoats shall be limited to a VOC content level of no more than 420 g/l (3.5 lb/gal) of coating (less water and exempt solvents) as applied. VOC emissions from self-priming topcoats shall be limited to a VOC content level of no more than 420 g/l (3.5 lb/gal) of self-priming topcoat (less water and exempt solvents) as applied.

**2.f** 63.745(f)(1) - 9/1/95

The permittee shall use brush coating and/or high volume low pressure (HVLP) spraying techniques for the application of all primers and topcoats.

**2.g** 63.745(g)(1) - 9/1/95

Inorganic HAP emissions - The permittee shall apply coatings that contain inorganic HAP in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets.

**2.h** 63.745(g)(2)(i) - 9/1/95 modified 3/27/98, (i) changed to (i)(B)

Inorganic HAP emissions - water wash - The permittee shall control air stream from this operation by passing the air stream through a water wash system that shall remain in operation during all coating application operations before exhausting it to the atmosphere.

**2.i** 63.745(g)(3) - 9/1/95

Inorganic HAP emissions - water wash - If the water path in the water wash system fails the visual continuity / flow characteristics check, or the water flow rate recorded exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures, or the booth manufacturer's or locally prepared maintenance procedures for the water wash system have not been performed as scheduled, shutdown the operation immediately and take corrective action. The operation shall not be resumed until the water flow rate is returned within the specified limit(s).

## 2. Additional Terms and Conditions (continued)

**2.j** 63.745(g)(4) - 9/1/95

Inorganic HAP emissions - water wash / filter - The requirements of terms A.I.2.g thru i do not apply to the following:

- a. Touch-up of scratched surfaces or damaged paint;
- b. Hole daubing for fasteners;
- c. Touch-up of trimmed edges;
- d. Coating prior to joining dissimilar metal components;
- e. Stencil operations performed by brush or air brush;
- f. Section joining;
- g. Touch-up of bushings and other similar parts;
- h. Sealant detackifying; and
- i. Painting parts in an area identified in a Title V permit, where the permitting authority has determined that it is not technically feasible to paint the parts in a booth. The painting that occurs in this emissions unit is the coating of aircraft in a hangar, it is not technically feasible to paint aircraft in a booth.

**2.k** 63.741(f) - 9/1/95

All priming & Topcoat operations - The requirements of terms A.I.2.d thru i do not apply to the use of specialty coatings, adhesives, adhesive bonding primers, or sealants at aerospace facilities. The requirements of terms A.I.2.d thru i also do not apply to primers, topcoats, and cleaning solvents containing HAP or VOC at a concentration less than 0.1% for carcinogens or 1.0% for non-carcinogens, as determined from manufacturer's representations.

**2.l** 63.741(g) - 9/1/95

All priming & Topcoat operations - The requirements of terms A.I.2.d thru i do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 189 l (50 gal), and the combined annual total of all such primers, topcoats, and chemical milling maskants used at a facility does not exceed 757 l (200 gal). Primers and topcoats exempted under A.I.2.k are not included in the 50 and 200 gallon limits.

**2.m** 63.748 - 9/1/95

The permittee shall conduct the handling and transfer of the waste that contains HAP to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.

## II. Operational Restrictions

None

## III. Monitoring and/or Record Keeping Requirements

**1.** 63.751(a) - 9/1/95

Enclosed Spray Gun Cleaners - If the permittee employs an enclosed spray gun cleaner shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation.

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

2. 63.752(b) - 9/1/95 - modified 3/27/98  
Cleaning operation - The permittee shall maintain the following information for the cleaning operation, as appropriate:
  - a. The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.
  - b. For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in 40 CFR 63.744(b)(1):
    - i. The name of each cleaning solvent used.
    - ii. All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements.
    - iii. Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.
  - c. For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in 40 CFR 63.744(b)(1), but does comply with the vapor pressure requirement above:
    - i. The name of each cleaning solvent used.
    - ii. The composite vapor pressure of each cleaning solvent used.
    - iii. All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent.
    - iv. The amount (in gallons) of each cleaning solvent used each month at each operation.
  - d. A record of all leaks from enclosed spray gun cleaners identified during the inspection that includes for each leak found:
    - i. Source identification.
    - ii. Date leak was discovered.
    - iii. Date leak was repaired.
3. 63.752(c) - 9/1/95  
Primer & Topcoat - organic HAP and VOC - The permittee shall maintain the following information for the prime coat and topcoat application operations, as appropriate:
  - a. The name and VOC content as received and as applied of each primer and topcoat used at the facility.
  - b. The mass of organic HAP emitted per unit volume of coating as applied (less water) (H) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G) for each coating formulation within each coating category used each month (as calculated using the procedures specified in 63.750(c) and (e)).
  - c. All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H and G above.
  - d. The volume (gal) of each coating formulation within each coating category used each month.
4. The permittee shall collect and record the following information each day for the paint operation:
  - a. The name and identification number of each coating employed.
  - b. The volume, in gallons, of each coating employed.
  - c. The total volume, in gallons, of all of the coatings employed.

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

5. The permittee shall collect and record the following information each month for the paint operation:
  - a. The name and identification of each coating and cleanup material employed.
  - b. The volume, in gallons, of each coating and cleanup material employed.
  - c. The total volume, in gallons, of all coatings and cleanup materials employed.
  - d. The VOC content of each cleanup material, in pounds per gallon.
  - e. The VOC content of each coating, as applied, in pounds per gallon.
  - f. The total VOC emissions from all coatings and cleanup materials employed, in pounds.

### IV. Reporting Requirements

1. 63.753(b) - 9/1/95  
Cleaning operation - The permittee shall submit semi-annual reports occurring every 6 months from the date of the notification of compliance status that identify:
  - a. Any instance where a non-compliant cleaning solvent is used for hand-wipe cleaning operation;
  - b. A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in 40 CFR 63.744(b)(1).
  - c. Any instance where a non-compliant spray gun cleaning method is used.
  - d. Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days.
  - e. If the operations have been in compliance for the semi-annual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.
2. 63.753(c) - 9/1/95  
Primer & Topcoat operations - The permittee shall submit semi-annual reports occurring every 6 months from the date of the notification of compliance status that identify:  
  
63.753(c)(1)(i) - 9/1/95
  - a. Each value of H and G recorded above that exceeds the applicable organic HAP or VOC content limit.  
63.753(c)(1)(vi) - 9/1/95 - water wash only
  - b. All times when a primer or topcoat application operation was not immediately shut down when the water flow rate through a conventional water wash system, or the recommended parameter(s) that indicate the booth performance for pumpless systems, as appropriate, was outside the limit(s) specified by the booth manufacturer or in locally prepared operating procedures.  
63.753(c)(1)(vii) - 9/1/95
  - c. If the operations have been in compliance for the semi-annual period, a statement that the operations have been in compliance with the applicable standards.
3. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the paint operation employed more than the applicable maximum daily coating usage limit of 8 gallons and any monthly record showing that the paint operation employed more than the applicable maximum coating and cleanup materials suages, combined, of 40 gallons. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance occurs.

#### IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly OC emissions of 160 pounds. These reports shall be due by the dates specified in Part 1 - General Terms and Conditions of this permit under section (A)(1).
5. The permittee shall also submit annual reports that specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
less than or equal to 8 gallons/day coating usage

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.

- 1.b Emission Limitation -  
0.551 lb/hour PE

Applicable Compliance Method -  
To determine the actual worst case emissions rate for particulates, the following equation shall be used:

$$E = \text{maximum coating solids usage rate in pounds per hour} \times (1 - TE) \times (1 - CE)$$

$$E = \text{particulate matter emission rate (lbs/hour)}$$

TE = transfer efficiency, which is the ration of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

- 1.c Emission Limitation -  
Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided 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) using the methods and procedures specified in USEPA Reference Method 9.

- 1.d Emission Limitation -  
less than or equal to 40 gallons/month coating and cleanup materials usage

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.

- 1.e Emission Limitation -  
160 lbs/month VOC, including cleanup

Applicable Compliance Method -  
Compliance shall be based upon record keeping requirements established in section A.III of this permit.

**V. Testing Requirements (continued)**

- 1.f** Emission Limitation -  
1.0 TPY VOC, including cleanup

Applicable Compliance Method -

Compliance shall be based upon record keeping requirements established in section A.III of this permit and shall be the sum of the 12 monthly VOC emission rates for the calendar year, divided by 2,000 pounds per ton.

- 2.** Formulation data or USEPA method 24 shall be employed to measure the VOC content for all coatings and cleanup materials.

**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>
aircraft maintenance paint touch-up, Building 34020 (5093)		

**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:** 5555 (N303)

**Activity Description:** Classified materials incinerator; F/20306

#### 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>
Classified materials waste incinerator, Building 20305 (5555)	OAC rule 3745-17-09(B)	0.10 pound particulate (PE) per 100 pounds refuse charged
	OAC rule 3745-31-05(A)(3) PTI 08-3594	0.35 lb/hour and 0.67 TPY particulate emissions (PE);  0.55 lb/hour and 1.06 TPY nitrogen oxides (NOx);  0.56 lb/hour and 1.08 TPY sulfur dioxide (SO2);  0.05 lb/hour and 0.10 TPY carbon monoxide (CO);  0.28 lb/hour and 0.54 TPY total chromium;
		1.34 lbs/hour and 2.57 TPY hydrochloric acid (HCl);
		Visible emissions shall not exceed 5% opacity, as a six-minute average
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-09(B), 3745-17-07(A), 3745-23-06(B) and 3745-21-08(B).
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.a.

## **2. Additional Terms and Conditions**

- 2.a** The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in permit to install No. 08-3594.

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 primary combustion chamber for this incinerator shall be maintained so that the exit gas is at a minimum temperature of 1200 degrees Fahrenheit. The secondary combustion chamber for this incinerator shall be maintained so that the exit gas temperature is at a minimum of 1690 degrees Fahrenheit. The tertiary combustion chamber for this incinerator shall be maintained so that the exit gas temperature is at a minimum of 1800 degrees Fahrenheit.
- 2.** The permittee shall employ a lockout system on the incinerator which shall prevent the charging of waste to the primary chamber at all times when the exit temperature of the secondary or tertiary chamber is less than 1600 degrees Fahrenheit. The lockout system shall also prevent recharging of waste until the combustion and burn-down cycles are complete.
- 3.** The maximum amount of waste material charged to this incinerator shall not exceed 350 pounds per hour.
- 4.** The waste charged to this incinerator shall not exceed the ratio of 75:25 of plastic to non-plastic materials.
- 5.** Chromium-containing materials are defined as, but not limited to, audio and video tapes and computer diskettes. The waste generating organizations shall be required to separate these chromium-containing materials from the rest of the waste stream and place them in a clearly marked bag before drop-off.
- 6.** This incinerator shall be permitted to operate with a one hour pre-heat period during which materials may be charged to the primary chamber for the purpose of bringing the combustion chambers to the operating temperatures specified in A.II.1.

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

- 1.** The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the primary, secondary, and tertiary combustion temperatures when the incinerator is in operation. Units shall be in degrees Fahrenheit. Accuracy for each thermocouple, and recorder shall be guaranteed by the manufacturer to be within 0.75 percent of the temperature being measured or 2.5 degrees Fahrenheit, whichever is greater. The temperature monitors and recorders shall be installed, calibrated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
- 2.** The permittee shall maintain daily records of the following information:
  - a.** the amount of plastic material charged to the incinerator, in pounds;
  - b.** the total amount of materials charged to the incinerator, in pounds;
  - c.** the total number of hours of operation; and
  - d.** the average hourly materials charging rate to the incinerator, (i.e. (b)/(c)), in lbs/hour.

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

3. The permittee shall weigh the chromium-containing bags and track them separately from the rest of the feed material in order to monitor the quantity of these materials. The feed rate of these materials shall not exceed the rate that demonstrated compliance with the total chromium allowable emission rate based on the most recent stack test.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports to the Director (the appropriate Ohio EPA District Office or local air agency) which provide the following information for each period during which the primary, secondary, or tertiary combustion chamber exhaust gas temperatures fall below the applicable limitations:

- a. the date of excursion;
- b. the time interval over which the excursion occurs;
- c. the temperature values during the excursion;
- d. the cause(s) for the excursion; and,
- e. the corrective actions which have been or will be taken to prevent similar excursions in the future.

These reports shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the deviation has occurred.

2. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record that shows the material charged to the incinerator exceeded 350 lbs/hour and/or the plastics material charged exceeded 75% of the total materials charged. This notification shall include a copy of such record as well as any corrective action(s) taken and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 45 days after the exceedance has occurred.

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
0.10 lb PE/100 lbs refuse material charged

Applicable Compliance Method -

Compliance with this mass emission limitation was demonstrated during a July 31, 1997 performance test with results showing emissions of 0.06 lb PE/100 lbs refuse material charged. If required, compliance shall be based upon additional performance testing conducted in accordance with OAC rule 3745-17-03(B)(8).

- 1.b Emission Limitation -  
5% opacity, as a six-minute average

Applicable Compliance Method -

Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

**V. Testing Requirements (continued)**

**1.c** Emission Limitation -  
0.35 lb/hour PE

Applicable Compliance Method -

Compliance with this mass emission limitation was demonstrated during a July 31, 1997 performance test with results showing emissions of 0.21 lb PE/hour. If required, compliance shall be based upon additional performance testing conducted in accordance with OAC rule 3745-17-03(B)(8).

Emission Limitation -  
0.67 TPY PE

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.2. and shall be the sum of the daily material charging rates for the calendar year multiplied by the particulate emission factor determined during the most recent emissions test that demonstrated compliance, divided by 2,000 lbs/ton. Until additional test are conducted the emission factor of 0.00058 lb PE/lb material charged, as determined during the July 31, 1997 test, shall be used.

**1.d** Emission Limitation -  
0.55 lb/hour NO<sub>x</sub>

Applicable Compliance Method -

Compliance shall be determined by multiplying the maximum hourly material charged to the incinerator (350 lbs/hour) by the emission factor of 0.00158 lb NO<sub>x</sub>/lb refuse charged, as specified in AP-42 chapter 2.1-9 (10/96).

Emission Limitation -  
1.06 TPY NO<sub>x</sub>

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.2. and shall be the sum of the daily material charging rates for the calendar year multiplied by the emission factor of 0.00158 lb NO<sub>x</sub>/lb material charged, as specified in AP-42 chapter 2.1-9 (10/96), divided by 2,000 lbs/ton.

**1.e** Emission Limitation -  
0.56 lb/hour SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be determined by multiplying the maximum hourly material charged to the incinerator (350 lbs/hour) by the emission factor of 0.0016 lb SO<sub>2</sub>/lb refuse charged, as specified in AP-42 chapter 2.1-9 (10/96).

Emission Limitation -  
1.08 TPY SO<sub>2</sub>

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.2. and shall be the sum of the daily material charging rates for the calendar year multiplied by the emission factor of 0.0016 lb SO<sub>2</sub>/lb material charged, as specified in AP-42 chapter 2.1-9 (10/96), divided by 2,000 lbs/ton.

## V. Testing Requirements (continued)

- 1.f** Emission Limitation -  
0.05 lb/hour CO

Applicable Compliance Method -

Compliance shall be determined by multiplying the maximum hourly material charged to the incinerator (350 lbs/hour) by the emission factor of 0.00015 lb CO/lb refuse charged, as specified in AP-42 chapter 2.1-9 (10/96).

- Emission Limitation -  
0.10 TPY CO

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.2. and shall be the sum of the daily material charging rates for the calendar year multiplied by the emission factor of 0.00015 lb CO/lb material charged, as specified in AP-42 chapter 2.1-9 (10/96), divided by 2,000 lbs/ton.

- 1.g** Emission Limitation -  
0.28 lb/hour total chromium

Applicable Compliance Method -

Compliance with this mass emission limitation was demonstrated during a July 31, 1997 performance test with results showing emissions of 0.0000206 lb/hour total chromium. If required, compliance shall be based upon additional performance testing.

- Emission Limitation -  
0.54 TPY total chromium

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.2. and shall be the sum of the daily material charging rates for the calendar year multiplied by the total chromium emission factor determined during the most recent emissions test that demonstrated compliance, divided by 2,000 lbs/ton. Until additional test are conducted the emission factor of 5.72 E-08 lb Cr/lb material charged, as determined during the July 31, 1997 test, shall be used.

- 1.h** Emission Limitation -  
1.34 lbs/hour HCl

Applicable Compliance Method -

Compliance shall be determined by multiplying the maximum hourly refuse charged to the incinerator (350 lbs/hour) by the company developed mass balance emission factor of 0.00383 lb HCl/lb refuse charged.

- Emission Limitation -  
2.57 TPY HCl

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.2. and shall be the sum of the daily material charging rates for the calendar year multiplied by the company developed mass balance emission factor of 0.00383 lb HCl/lb material charged, divided by 2,000 lbs/ton.

## VI. Miscellaneous Requirements

**None**

**B. State Enforceable Section**

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

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

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

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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

**Emissions Unit ID:** 2547 (P310)

**Activity Description:** Five jet engine test stand; F/20098

**A. State and Federally Enforceable Section**

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
5-jet engine windtunnel, Building 20098 (2547)	OAC rule 3745-31-05(D) PTI 08-2744	16.12 TPY particulates, as a rolling, 12-month summation  20.80 TPY nitrogen oxides (NOx), as a rolling, 12-month summation  1.33 TPY sulfur dioxide (SO2), as a rolling, 12-month summation  13.52 TPY hydrocarbons (HC), as a rolling, 12-month summation  16.02 TPY carbon monoxide (CO), as a rolling, 12-month summation
	OAC rule 3745-31-05(A)(3) PTI 08-2744	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-31-05(D).

**2. Additional Terms and Conditions**

- 2.a Hydrocarbons (HC), for the purposes of this permit, are defined as any compounds which contain only hydrogen and carbon.

**II. Operational Restrictions**

1. The maximum annual fuel usage for this emissions unit shall not exceed 478,706 gallons, based upon a rolling, 12-month summation of the fuel usage figures.

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

1. The permittee shall maintain monthly records of the following information:
  - a. The fuel usage for each month, in gallons.
  - b. The rolling, 12-month summation of the fuel usage rates, in gallons.
  - c. The calculated emissions for particulates, NO<sub>x</sub>, SO<sub>2</sub>, HC, and CO, in tons per month (see A.V.1.)
  - d. The rolling, 12-month summation of emissions of particulates, NO<sub>x</sub>, SO<sub>2</sub>, HC, and CO, in tons.

### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month fuel usage limitation, and/or the rolling, 12-month emission limitations. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

### V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation -  
16.12 TPY particulates, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.1 and shall be determined by multiplying the total JP-8 fuel burned for the rolling 12-month period by the emission factor of 0.038 pounds/mmBtu, as specified in AP-42 Chapter 3.1-1 (10/96), and the heat content of the fuel, divided by 2,000 pounds per ton.

- 1.b Emission Limitation -  
20.80 TPY NO<sub>x</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.1 and shall be determined by multiplying the total JP-8 fuel burned for the rolling 12-month period by the emission factor of 0.698 pounds/mmBtu, as specified in AP-42 Chapter 3.1-1 (10/96), and the heat content of the fuel, divided by 2,000 pounds per ton.

- 1.c Emission Limitation -  
1.33 TPY SO<sub>2</sub>, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.1 and shall be determined by multiplying the total JP-8 fuel burned for the rolling 12-month period by the emission factor of 0.0101 pounds/mmBtu, as specified in AP-42 Chapter 3.1-1 (10/96), and the heat content of the fuel, divided by 2,000 pounds per ton.

- 1.d Emission Limitation -  
13.52 TPY HC, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.1 and shall be determined by multiplying the total JP-8 fuel burned for the rolling 12-month period by the emission factor of 0.017 pounds/mmBtu, as specified in AP-42 Chapter 3.1-1 (10/96), and the heat content of the fuel, divided by 2,000 pounds per ton.

**V. Testing Requirements (continued)**

- 1.e** Emission Limitation -  
16.02 TPY CO, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified in A.III.1 and shall be determined by multiplying the total JP-8 fuel burned for the rolling 12-month period by the emission factor of 0.048 pounds/mmBtu, as specified in AP-42 Chapter 3.1-1 (10/96), and the heat content of the fuel, divided by 2,000 pounds per ton.

- 1.f** Emission Limitation -  
478,706 gallons JP-8 fuel usage, as a rolling, 12-month summation

Applicable Compliance Method -

Compliance shall be based upon record keeping as specified 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>
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**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

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

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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