



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL  
MONTGOMERY COUNTY**

**CERTIFIED MAIL**

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov.  
Center

**Application No: 08-04392**

**DATE: 7/23/2002**

Miami Valley Hospital  
Jim Hartke  
1 Wyoming Street  
Dayton, OH 45409-2722

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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

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

Environmental Review Appeals Commission  
236 East Town Street, Room 300  
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo  
Field Operations and Permit Section  
Division of Air Pollution Control

CC: USEPA

RAPCA



**Permit To Install**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**FINAL PERMIT TO INSTALL 08-04392**

Application Number: 08-04392  
APS Premise Number: 0857040180  
Permit Fee: **\$550**  
Name of Facility: Miami Valley Hospital  
Person to Contact: Jim Hartke  
Address: 1 Wyoming Street  
Dayton, OH 45409-2722

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1 Wyoming St**  
**Dayton, Ohio**

Description of proposed emissions unit(s):  
**8.46 mmBtu/hr natural gas-oil fired boiler.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

## Part I - GENERAL TERMS AND CONDITIONS

### A. State and Federally Enforceable Permit To Install General Terms and Conditions

#### 1. Monitoring and Related Recordkeeping 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.
- 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, 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. 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. See B.10 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, 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. 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.
- 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 are true, accurate, and complete.

## **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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

## **3. Risk Management Plans**

If the permittee is required to 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"), the permittee shall comply with the requirement to register such a plan.

## **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.

## **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.

## **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. 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.

## **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. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

## **8. 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.

## **9. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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 ORC section 3704.08.
  - 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.

#### **10. Permit To Operate Application**

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

#### **11. Best Available Technology**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

#### **12. 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.

## **B. State Only Enforceable Permit To Install General Terms and Conditions**

### **1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

### **2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable 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 (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) 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. 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.)

### **3. 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.

### **4. Termination of Permit To Install**

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

## **5. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

## **6. Public Disclosure**

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

## **7. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

## **8. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**9. 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.

**C. Permit To Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)  
 TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
Particulates	3.2
Sulfur dioxide	113
Nitrous oxide	31.8
Organic compounds	3.8
Carbon monoxide	29.4

**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B007 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-10(B)(1)
*Modification		OAC rule 3745-17-07(A)

Applicable Emissions  
Limitations/Control  
Measures

of actual heat input

0.52 TPY particulates, the individual maximum for B007 and 3.2 TPY particulates, combined maximum for B007-13, B 015 , B016 and B018

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

4.26 lbs/hour and 18.6 TPY sulfur dioxide (SO<sub>2</sub>), the individual maximum for B007 and 113 TPYSO<sub>2</sub>, combined maximum for B007-13, B 015 , B016 and B018

1.20 lbs/hour and 5.26 TPY nitrogen oxides (NO<sub>x</sub>), the individual maximum for B007 and 31.8 TPY NO<sub>x</sub>, combined maximum for B007-13, B 015 , B016 and B018

0.67 lb/hour and 2.94 TPY carbon monoxide (CO)

0.09 lb/hour and 0.38 TPY organic compounds (OC)

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).

0.020 lb particulates/mmBtu

## 2. Additional Terms and Conditions

**2.a** The 4.26 lbs/hour SO<sub>2</sub>, 1.20 lbs/hour NO<sub>x</sub>, 0.67 lb/hour CO, and 0.09 lb/hour OC allowable emission rates were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.

**2.b** The individual maximum annual No. 2 fuel oil usage is based on the potential to emit.

## II. Operational Restrictions

1. The maximum annual No. 2 fuel oil usage rate for the combined emissions units, B007-13, B015, B016 and B018, shall not exceed 3,182,400 gallons, based upon a rolling 12 month summation of the fuel oil usage. The permittee has sufficient records to demonstrate compliance with this rolling summation such that a first 12 month cumulative table is not required.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
3. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The amount of fuel oil burned, in gallons for this emissions unit.
  - b. The combined amount of fuel oil burned in gallons for B007-13, B015, B016 and B018.
  - c. The amount of natural gas burned, in mm cu. ft.
  - d. The SO<sub>2</sub>, NO<sub>x</sub>, particulates, CO, and OC emission rates, in tons, calculated as follows:
    - i. for SO<sub>2</sub>:
      - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
      - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from

Emissions Unit ID: B007

section 1.a) by the emission factor of 142S\* lbs SO<sub>2</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.i (a) + 1.c.i (b), and then divide by 2000 lbs/ton.

ii. for NO<sub>x</sub>:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 20.0 lbs NO<sub>x</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.ii (a) + 1.c.ii (b), and then divide by 2000 lbs/ton.

iii. for particulates:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 7.6 lbs particulates (filterable)/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 2.0 lbs particulates/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iii (a) + 1.c.iii (b), and then divide by 2000 lbs/ton.

iv. for CO:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 84 lbs CO/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 5.0 lbs CO/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iv (a) + 1.c.iv (b), and then divide by 2000 lbs/ton.

v. for OC:

- (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 11.0 lbs OC/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
- (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 0.556 lb OC/1000 gallons [from AP-42, Table 1.3-3 (revised 9/98)]; and
- (c) add 1.c.v (a) + 1.c.v (b), and then divide by 2000 lbs/ton.

\* the sulfur content (in percent, by weight) of the No. 2 fuel oil (0.5%)

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 and the permittee's or oil supplier's analyses for sulfur content and heat content.
3. 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. At the end of each calendar month, the representative samples of oil from all the shipments of oil which were received during that calendar month shall each be combined (in proportion to the amount of oil received in each shipment) into one composite sample.

For each monthly composite sample, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 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 deviation (excursion) reports that identify all exceedances of the maximum annual fuel oil usage restriction and the fuel oil sulfur content (in percent, by weight) limitation. These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

**Issued**

Emissions Unit ID: B007

2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the annual no. 2 fuel oil gallon usage restriction. These reports shall be submitted within 30 days after the exceedance of the usage restriction.
3. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or no. 2 fuel oil combusted in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

**V. Testing Requirements**

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

- a. Emission Limitation -  
0.020 lb particulates/mmBtu of 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 AP-42, Table 1.4-2 ( revised 7/98) emission factor for natural gas (1.9 lbs particulates/mm cu. ft), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for No. 2 fuel oil (2.0 lbs particulates/1000 gallons), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

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

- b. Emission Limitation -  
20% opacity, as a six-minute average

## Applicable Compliance Method -

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

- c. Emission Limitation -  
18.6 TPY SO<sub>2</sub>, individual maximum for this emissions unit

## Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in sections A.III.1, 2, and 3 of this permit.

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Miami

PTI A<sub>1</sub>

**Issued: 7/23/2002**

Emissions Unit ID: B007

Emission Limitation -

113 TPY SO<sub>2</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 142 S lb SO<sub>2</sub>/1000 gallons, divided by 2000 lbs/ton.

- d. Emission Limitation -  
5.26 TPY NO<sub>x</sub>, individual maximum for this emissions unit

Applicable Compliance Method -

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

Emission Limitation -

31.8 TPY NO<sub>x</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 20 lbs NO<sub>x</sub>/ 1000 gallons, divided by 2000 lbs/ton.

- e. Emission Limitation -  
0.52 TPY particulates, individual maximum for this emissions unit

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

Emission Limitation -

3.2 TPY particulates, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 2.0 lbs/ 1000 gallons, divided by 2000 lbs/ton.

- f. Emission Limitation -  
4.26 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42,

Emissions Unit ID: B007

Table 1.3-1 (revised 9/98) emission factor of 142S lbs SO<sub>2</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 6.

- g. Emission Limitation -  
1.20 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO<sub>x</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- h. Emission Limitation -  
0.67 lb/hour CO

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5.0 lbs CO/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- i. Emission Limitation -  
2.94 TPY CO

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly CO rates for the calendar year.

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- j. Emission Limitation -  
0.09 lb/hour OC

**Issued: 7/23/2002****Applicable Compliance Method -**

When burning natural gas, compliance may be determined by multiplying the AP-42, Table 1.4-2 (revised 7/98) emission factor of 11.0 lbs OC/mm cu. ft. by the maximum hourly fuel burning capacity (mm cu ft./hour) of the emissions unit.

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.556 lb OC/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- k. Emission Limitation -  
0.38 TPY OC

**Applicable Compliance Method -**

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly OC rates for the calendar year.

- l. Emission Limitation -  
3,182,400 gallons/year fuel usage for B007-B013, B015, B016 and B018, based upon a rolling 12 month summation of the fuel oil usage.

**Applicable Compliance Method -**

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

- m. Emission Limitation -  
0.5% (by weight) sulfur content for the No. 2 fuel oil

**Applicable Compliance Method -**

Compliance shall be based upon the record keeping requirements specified in Sections A.III.2 and A.III.3 of this permit.

**VI. Miscellaneous Requirements**

1. \*The Terms & Conditions in this PTI supercede PTI's 08-03544, issued 3-29-2001 (for B007-B013) and 08-03780, issued 11-3-99 (for B015 and B016) and represents the annual fuel oil usage limitation of 3,182,400 gal/yr for emissions units B007-B013, B015, B016 and B018 as a result of the addition of B018 to this permit.

**B. State Only Enforceable Section**

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

- 1. The specific operations(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 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>
B007 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B008 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(A)
	OAC rule 3745-17-10(B)(1)	

Applicable Emissions  
Limitations/Control  
Measures

0.52 TPY particulates, the individual maximum for B008 and 3.2 TPY particulates, combined maximum for B007-13, B 015 , B016 and B018

4.26 lbs/hour and 18.6 TPY sulfur dioxide (SO<sub>2</sub>), the individual maximum for B008 and 113 TPYSO<sub>2</sub>, combined maximum for B007-13, B 015 , B016 and B018

1.20 lbs/hour and 5.26 TPY nitrogen oxides (NO<sub>x</sub>), the individual maximum for B008 and 31.8 TPY NO<sub>x</sub>, combined maximum for B007-13, B 015 , B016 and B018

0.67 lb/hour and 2.94 TPY carbon monoxide (CO)

0.09 lb/hour and 0.38 TPY organic compounds (OC)

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).

0.020 lb particulates/mmBtu

of actual heat input

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

## 2. Additional Terms and Conditions

**2.a** The 4.26 lbs/hour SO<sub>2</sub>, 1.20 lbs/hour NO<sub>x</sub>, 0.67 lb/hour CO, and 0.09 lb/hour OC allowable emission rates were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.

**2.b** The individual maximum annual No. 2 fuel oil usage is based on the potential to emit.

## II. Operational Restrictions

1. The maximum annual No. 2 fuel oil usage rate for the combined emissions units, B007-13, B015 , B016 and B018, shall not exceed 3,182,400 gallons, based upon a rolling 12 month summation of the fuel oil usage. The permittee has sufficient records to demonstrate compliance with this rolling summation such that a first 12 month cumulative table is not required.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
3. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The amount of fuel oil burned, in gallons.
  - b. The combined amount of fuel oil burned in gallons for B007-13, B015 , B016 and B018
  - c. The amount of natural gas burned, in mm cu. ft.
  - d. The SO<sub>2</sub>, NO<sub>x</sub>, particulates, CO, and OC emission rates, in tons, calculated as follows:
    - i. for SO<sub>2</sub>:
      - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
      - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from

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section 1.a) by the emission factor of 142S\* lbs SO<sub>2</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.i (a) + 1.c.i (b), and then divide by 2000 lbs/ton.

ii. for NO<sub>x</sub>:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 20.0 lbs NO<sub>x</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.ii (a) + 1.c.ii (b), and then divide by 2000 lbs/ton.

iii. for particulates:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 7.6 lbs particulates (filterable)/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 2.0 lbs particulates/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iii (a) + 1.c.iii (b), and then divide by 2000 lbs/ton.

iv. for CO:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 84 lbs CO/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 5.0 lbs CO/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iv (a) + 1.c.iv (b), and then divide by 2000 lbs/ton.

v. for OC:

- (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 11.0 lbs OC/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
- (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 0.556 lb OC/1000 gallons [from AP-42, Table 1.3-3 (revised 9/98)]; and
- (c) add 1.c.v (a) + 1.c.v (b), and then divide by 2000 lbs/ton.

\* the sulfur content (in percent, by weight) of the No. 2 fuel oil (0.5%)

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 and the permittee's or oil supplier's analyses for sulfur content and heat content.
3. 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. At the end of each calendar month, the representative samples of oil from all the shipments of oil which were received during that calendar month shall each be combined (in proportion to the amount of oil received in each shipment) into one composite sample.

For each monthly composite sample, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 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 deviation (excursion) reports that identify all exceedances of the maximum annual fuel oil usage restriction and the fuel oil sulfur content (in percent, by weight) limitation. These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

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2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the annual no. 2 fuel oil gallon usage restriction. These reports shall be submitted within 30 days after the exceedance of the usage restriction.
3. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or no. 2 fuel oil combusted in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.020 lb particulates/mmBtu of 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 AP-42, Table 1.4-2 ( revised 7/98) emission factor for natural gas (1.9 lbs particulates/mm cu. ft), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for No. 2 fuel oil (2.0 lbs particulates/1000 gallons), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
If required, compliance shall be demonstrated in accordance with the methods in OAC rule 3745-17-03(B)(9).
  - b. Emission Limitation -  
20% opacity, as a six-minute average  
  
Applicable Compliance Method -  
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).
  - c. Emission Limitation -  
18.6 TPY SO<sub>2</sub>, individual maximum for this emissions unit

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Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in sections A.III.1, 2, and 3 of this permit.

Emission Limitation -

113 TPY SO<sub>2</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 142 S lb SO<sub>2</sub>/1000 gallons, divided by 2000 lbs/ton.

- d. Emission Limitation -  
5.26 TPY NO<sub>x</sub>, individual maximum for this emissions unit

Applicable Compliance Method -

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

Emission Limitation -

31.8 TPY NO<sub>x</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 20 lbs NO<sub>x</sub>/ 1000 gallons, divided by 2000 lbs/ton.

- e. Emission Limitation -  
0.52 TPY particulates, individual maximum for this emissions unit

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

Emission Limitation -

3.2 TPY particulates, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 2.0 lbs/ 1000 gallons, divided by 2000 lbs/ton.

- f. Emission Limitation -  
4.26 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 142S lbs SO<sub>2</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 6.

- g. Emission Limitation -  
1.20 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO<sub>x</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- h. Emission Limitation -  
0.67 lb/hour CO

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5.0 lbs CO/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- i. Emission Limitation -  
2.94 TPY CO

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Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly CO rates for the calendar year.

- j. Emission Limitation -  
0.09 lb/hour OC

**Applicable Compliance Method -**

When burning natural gas, compliance may be determined by multiplying the AP-42, Table 1.4-2 (revised 7/98) emission factor of 11.0 lbs OC/mm cu. ft. by the maximum hourly fuel burning capacity (mm cu ft./hour) of the emissions unit.

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.556 lb OC/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- k. Emission Limitation -  
0.38 TPY OC

**Applicable Compliance Method -**

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly OC rates for the calendar year.

- l. Emission Limitation -  
3,182,400 gallons/year fuel usage for B007-B013, B015, B016 and B018, based upon a rolling 12 month summation of the fuel oil usage.

**Applicable Compliance Method -**

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

- m. Emission Limitation -  
0.5% (by weight) sulfur content for the No. 2 fuel oil

**Applicable Compliance Method -**

Compliance shall be based upon the record keeping requirements specified in Sections A.III.2 and A.III.3 of this permit.

**VI. Miscellaneous Requirements**

1. \*The Terms & Conditions in this PTI supercede PTI's 08-03544, issued 3-29-2001 (for B007-B013) and 08-03780, issued 11-3-99 (for B015 and B016) and represents the annual fuel oil usage limitation of 3,182,400 gal/yr for emissions units B007-B013, B015, B016 and B018 as a result of the addition of B018 to this permit.

**B. State Only Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
B008 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler		

**2. Additional Terms and Conditions**

**2.a** None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. State and Federally Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B009 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-10(B)(1)
		OAC rule 3745-17-07(A)

Applicable Emissions  
Limitations/Control  
Measures

minute average, except as provided by rule.

0.52 TPY particulates, the individual maximum for B009 and 3.2 TPY particulates, combined maximum for B007-13, B 015 , B016 and B018

4.26 lbs/hour and 18.6 TPY sulfur dioxide (SO2), the individual maximum for B009 and 113 TPYSO2, combined maximum for B007-13, B 015 , B016 and B018

1.20 lbs/hour and 5.26 TPY nitrogen oxides (NOx), the individual maximum for B009 and 31.8 TPY NOx, combined maximum for B007-13, B 015 , B016 and B018

0.67 lb/hour and 2.94 TPY carbon monoxide (CO)

0.09 lb/hour and 0.38 TPY organic compounds (OC)

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).

0.020 lb particulates/mmBtu of actual heat input

Visible emissions shall not exceed 20% opacity, as a six-

## 2. Additional Terms and Conditions

**2.a** The 4.26 lbs/hour SO<sub>2</sub>, 1.20 lbs/hour NO<sub>x</sub>, 0.67 lb/hour CO, and 0.09 lb/hour OC allowable emission rates were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.

**2.b** The individual maximum annual No. 2 fuel oil usage is based on the potential to emit.

## II. Operational Restrictions

1. The maximum annual No. 2 fuel oil usage rate for the combined emissions units, B007-13, B015 , B016 and B018, shall not exceed 3,182,400 gallons, based upon a rolling 12 month summation of the fuel oil usage. The permittee has sufficient records to demonstrate compliance with this rolling summation such that a first 12 month cumulative table is not required.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
3. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The amount of fuel oil burned, in gallons.
  - b. The combined amount of fuel oil burned in gallons for B007-13, B015 , B016 and B018
  - c. The amount of natural gas burned, in mm cu. ft.
  - d. The SO<sub>2</sub>, NO<sub>x</sub>, particulates, CO, and OC emission rates, in tons, calculated as follows:
    - i. for SO<sub>2</sub>:
      - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
      - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from

section 1.a) by the emission factor of 142S\* lbs SO<sub>2</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.i (a) + 1.c.i (b), and then divide by 2000 lbs/ton.

ii. for NO<sub>x</sub>:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 20.0 lbs NO<sub>x</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.ii (a) + 1.c.ii (b), and then divide by 2000 lbs/ton.

iii. for particulates:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 7.6 lbs particulates (filterable)/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 2.0 lbs particulates/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iii (a) + 1.c.iii (b), and then divide by 2000 lbs/ton.

iv. for CO:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 84 lbs CO/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 5.0 lbs CO/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iv (a) + 1.c.iv (b), and then divide by 2000 lbs/ton.

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Facility ID: **0857040180**

Emissions Unit ID: B009

- v. for OC:
- (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 11.0 lbs OC/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
  - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 0.556 lb OC/1000 gallons [from AP-42, Table 1.3-3 (revised 9/98)]; and
  - (c) add 1.c.v (a) + 1.c.v (b), and then divide by 2000 lbs/ton.

\* the sulfur content (in percent, by weight) of the No. 2 fuel oil (0.5%)

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 and the permittee's or oil supplier's analyses for sulfur content and heat content.
3. 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. At the end of each calendar month, the representative samples of oil from all the shipments of oil which were received during that calendar month shall each be combined (in proportion to the amount of oil received in each shipment) into one composite sample.

For each monthly composite sample, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 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 deviation (excursion) reports that identify all exceedances of the maximum annual fuel oil usage restriction and the fuel oil sulfur content (in percent, by weight) limitation. These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

**Issued: 7/23/2002**

2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the annual no. 2 fuel oil gallon usage restriction. These reports shall be submitted within 30 days after the exceedance of the usage restriction.
3. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or no. 2 fuel oil combusted in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

**V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.020 lb particulates/mmBtu of 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 AP-42, Table 1.4-2 ( revised 7/98) emission factor for natural gas (1.9 lbs particulates/mm cu. ft), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for No. 2 fuel oil (2.0 lbs particulates/1000 gallons), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
If required, compliance shall be demonstrated in accordance with the methods in OAC rule 3745-17-03(B)(9).
  - b. Emission Limitation -  
20% opacity, as a six-minute average  
  
Applicable Compliance Method -  
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).
  - c. Emission Limitation -  
18.6 TPY SO<sub>2</sub>, individual maximum for this emissions unit

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Facility ID: **0857040180**

Emissions Unit ID: B009

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in sections A.III.1, 2, and 3 of this permit.

Emission Limitation -

113 TPY SO<sub>2</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 142 S lb SO<sub>2</sub>/1000 gallons, divided by 2000 lbs/ton.

- d. Emission Limitation -  
5.26 TPY NO<sub>x</sub>, individual maximum for this emissions unit

Applicable Compliance Method -

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

Emission Limitation -

31.8 TPY NO<sub>x</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 20 lbs NO<sub>x</sub>/ 1000 gallons, divided by 2000 lbs/ton.

- e. Emission Limitation -  
0.52 TPY particulates, individual maximum for this emissions unit

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

Emission Limitation -

3.2 TPY particulates, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 2.0 lbs/ 1000 gallons, divided by 2000 lbs/ton.

- f. Emission Limitation -  
4.26 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 142S lbs SO<sub>2</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 6.

- g. Emission Limitation -  
1.20 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO<sub>x</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- h. Emission Limitation -  
0.67 lb/hour CO

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5.0 lbs CO/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- i. Emission Limitation -  
2.94 TPY CO

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PTI Application: **08 01202**  
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Facility ID: **0857040180**

Emissions Unit ID: B009

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly CO rates for the calendar year.

- j. Emission Limitation -  
0.09 lb/hour OC

**Applicable Compliance Method -**

When burning natural gas, compliance may be determined by multiplying the AP-42, Table 1.4-2 (revised 7/98) emission factor of 11.0 lbs OC/mm cu. ft. by the maximum hourly fuel burning capacity (mm cu ft./hour) of the emissions unit.

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.556 lb OC/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- k. Emission Limitation -  
0.38 TPY OC

**Applicable Compliance Method -**

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly OC rates for the calendar year.

- l. Emission Limitation -  
3,182,400 gallons/year fuel usage for B007-B013, B015, B016 and B018, based upon a rolling 12 month summation of the fuel oil usage.

**Applicable Compliance Method -**

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

- m. Emission Limitation -  
0.5% (by weight) sulfur content for the No. 2 fuel oil

**Applicable Compliance Method -**

Compliance shall be based upon the record keeping requirements specified in Sections A.III.2 and A.III.3 of this permit.

**VI. Miscellaneous Requirements**

1. \*The Terms & Conditions in this PTI supercede PTI's 08-03544, issued 3-29-2001 (for B007-B013) and 08-03780, issued 11-3-99 (for B015 and B016) and represents the annual fuel oil usage limitation of 3,182,400 gal/yr for emissions units B007-B013, B015, B016 and B018 as a result of the addition of B018 to this permit.

**B. State Only Enforceable Section**

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

1. The specific operations(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 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>
B009 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

- 1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B010 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-10(B)(1)
		OAC rule 3745-17-07(A)

Applicable Emissions  
Limitations/Control  
Measures

0.52 TPY particulates, the individual maximum for B010 and 3.2 TPY particulates, combined maximum for B007-13, B 015 , B016 and B018

4.26 lbs/hour and 18.6 TPY sulfur dioxide (SO<sub>2</sub>), the individual maximum for B010 and 113 TPYSO<sub>2</sub>, combined maximum for B007-13, B 015 , B016 and B018

1.20 lbs/hour and 5.26 TPY nitrogen oxides (NO<sub>x</sub>), the individual maximum for B010 and 31.8 TPY NO<sub>x</sub>, combined maximum for B007-13, B 015 , B016 and B018

0.67 lb/hour and 2.94 TPY carbon monoxide (CO)

0.09 lb/hour and 0.38 TPY organic compounds (OC)

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).

0.020 lb particulates/mmBtu

of actual heat input

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

## 2. Additional Terms and Conditions

- 2.a** The 4.26 lbs/hour SO<sub>2</sub>, 1.20 lbs/hour NO<sub>x</sub>, 0.67 lb/hour CO, and 0.09 lb/hour OC allowable emission rates were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.
- 2.b** The individual maximum annual No. 2 fuel oil usage is based on the potential to emit.

## II. Operational Restrictions

1. The maximum annual No. 2 fuel oil usage rate for the combined emissions units, B007-13, B015, B016 and B018, shall not exceed 3,182,400 gallons, based upon a rolling 12 month summation of the fuel oil usage. The permittee has sufficient records to demonstrate compliance with this rolling summation such that a first 12 month cumulative table is not required.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
3. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The amount of fuel oil burned, in gallons.
  - b. The combined amount of fuel oil burned in gallons for B007-13, B015, B016 and B018
  - c. The amount of natural gas burned, in mm cu. ft.
  - d. The SO<sub>2</sub>, NO<sub>x</sub>, particulates, CO, and OC emission rates, in tons, calculated as follows:
    - i. for SO<sub>2</sub>:
      - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
      - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 142S\* lbs SO<sub>2</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and
      - (c) add 1.c.i (a) + 1.c.i (b), and then divide by 2000 lbs/ton.

- ii. for NO<sub>x</sub>:
  - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
  - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 20.0 lbs NO<sub>x</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and
  - (c) add 1.c.ii (a) + 1.c.ii (b), and then divide by 2000 lbs/ton.
- iii. for particulates:
  - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 7.6 lbs particulates (filterable)/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
  - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 2.0 lbs particulates/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and
  - (c) add 1.c.iii (a) + 1.c.iii (b), and then divide by 2000 lbs/ton.
- iv. for CO:
  - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 84 lbs CO/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
  - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 5.0 lbs CO/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and
  - (c) add 1.c.iv (a) + 1.c.iv (b), and then divide by 2000 lbs/ton.

v. for OC:

- (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 11.0 lbs OC/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
- (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 0.556 lb OC/1000 gallons [from AP-42, Table 1.3-3 (revised 9/98)]; and
- (c) add 1.c.v (a) + 1.c.v (b), and then divide by 2000 lbs/ton.

\* the sulfur content (in percent, by weight) of the No. 2 fuel oil (0.5%)

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 and the permittee's or oil supplier's analyses for sulfur content and heat content.
3. 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. At the end of each calendar month, the representative samples of oil from all the shipments of oil which were received during that calendar month shall each be combined (in proportion to the amount of oil received in each shipment) into one composite sample.

For each monthly composite sample, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 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 deviation (excursion) reports that identify all exceedances of the maximum annual fuel oil usage restriction and the fuel oil sulfur content (in percent, by weight) limitation. These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

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2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the annual no. 2 fuel oil gallon usage restriction. These reports shall be submitted within 30 days after the exceedance of the usage restriction.
3. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or no. 2 fuel oil combusted in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
 0.020 lb particulates/mmBtu of 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 AP-42, Table 1.4-2 ( revised 7/98) emission factor for natural gas (1.9 lbs particulates/mm cu. ft), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
 For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for No. 2 fuel oil (2.0 lbs particulates/1000 gallons), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
 If required, compliance shall be demonstrated in accordance with the methods in OAC rule 3745-17-03(B)(9).
  - b. Emission Limitation -  
 20% opacity, as a six-minute average  
  
 Applicable Compliance Method -  
 If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).
  - c. Emission Limitation -  
 18.6 TPY SO<sub>2</sub>, individual maximum for this emissions unit  
  
 Applicable Compliance Method -  
 Compliance shall be based upon the record keeping requirements in sections A.III.1, 2, and 3 of this permit.

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**Issued**

Facility ID: **0857040180**

Emissions Unit ID: B010

Emission Limitation -  
113 TPY SO<sub>2</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 142 S lb SO<sub>2</sub>/1000 gallons, divided by 2000 lbs/ton.

- d. Emission Limitation -  
5.26 TPY NO<sub>x</sub>, individual maximum for this emissions unit

Applicable Compliance Method -

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

Emission Limitation -

31.8 TPY NO<sub>x</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 20 lbs NO<sub>x</sub>/ 1000 gallons, divided by 2000 lbs/ton.

- e. Emission Limitation -  
0.52 TPY particulates, individual maximum for this emissions unit

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

Emission Limitation -

3.2 TPY particulates, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 2.0 lbs/ 1000 gallons, divided by 2000 lbs/ton.

- f. Emission Limitation -  
4.26 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

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

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When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 142S lbs SO<sub>2</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 6.

- g. Emission Limitation -  
1.20 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO<sub>x</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- h. Emission Limitation -  
0.67 lb/hour CO

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5.0 lbs CO/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- i. Emission Limitation -  
2.94 TPY CO

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Emissions Unit ID: B010

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly CO rates for the calendar year.

- j. Emission Limitation -  
0.09 lb/hour OC

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the AP-42, Table 1.4-2 (revised 7/98) emission factor of 11.0 lbs OC/mm cu. ft. by the maximum hourly fuel burning capacity (mm cu ft./hour) of the emissions unit.

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.556 lb OC/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- k. Emission Limitation -  
0.38 TPY OC

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly OC rates for the calendar year.

- l. Emission Limitation -  
3,182,400 gallons/year fuel usage

Applicable Compliance Method -

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

- m. Emission Limitation -  
0.5% (by weight) sulfur content for the No. 2 fuel oil

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in Sections A.III.2 and A.III.3 of this permit.

## VI. Miscellaneous Requirements

1. \*The Terms & Conditions in this PTI supercede PTI's 08-03544, issued 3-29-2001 (for B007-B013) and 08-03780, issued 11-3-99 (for B015 and B016) and represents the annual fuel

Emissions Unit ID: B010

oil usage limitation of 3,182,400 gal/yr for emissions units B007-B013, B015, B016 and B018 as a result of the addition of B018 to this permit.

**B. State Only Enforceable Section**

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

1. The specific operations(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 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>
B010 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

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**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

- 1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B011 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-10(B)(1)
		OAC rule 3745-17-07(A)

Applicable Emissions  
Limitations/Control  
Measures

0.52 TPY particulates, the individual maximum for B011 and 3.2 TPY particulates, combined maximum for B007-13, B 015 , B016 and B018

4.26 lbs/hour and 18.6 TPY sulfur dioxide (SO<sub>2</sub>), the individual maximum for B011 and 113 TPYSO<sub>2</sub>, combined maximum for B007-13, B 015 , B016 and B018

1.20 lbs/hour and 5.26 TPY nitrogen oxides (NO<sub>x</sub>), the individual maximum for B011 and 31.8 TPY NO<sub>x</sub>, combined maximum for B007-13, B 015 , B016 and B018

0.67 lb/hour and 2.94 TPY carbon monoxide (CO)

0.09 lb/hour and 0.38 TPY organic compounds (OC)

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).

0.020 lb particulates/mmBtu

of actual heat input

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

## 2. Additional Terms and Conditions

**2.a** The 4.26 lbs/hour SO<sub>2</sub>, 1.20 lbs/hour NO<sub>x</sub>, 0.67 lb/hour CO, and 0.09 lb/hour OC allowable emission rates were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.

**2.b** The individual maximum annual No. 2 fuel oil usage is based on the potential to emit.

## II. Operational Restrictions

1. The maximum annual No. 2 fuel oil usage rate for the combined emissions units, B007-13, B015, B016 and B018, shall not exceed 3,182,400 gallons, based upon a rolling 12 month summation of the fuel oil usage. The permittee has sufficient records to demonstrate compliance with this rolling summation such that a first 12 month cumulative table is not required.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
3. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The amount of fuel oil burned, in gallons.
  - b. The combined amount of fuel oil burned in gallons for B007-13, B015, B016 and B018
  - c. The amount of natural gas burned, in mm cu. ft.
  - d. The SO<sub>2</sub>, NO<sub>x</sub>, particulates, CO, and OC emission rates, in tons, calculated as follows:
    - i. for SO<sub>2</sub>:
      - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
      - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from

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section 1.a) by the emission factor of 142S\* lbs SO<sub>2</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.i (a) + 1.c.i (b), and then divide by 2000 lbs/ton.

ii. for NO<sub>x</sub>:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 20.0 lbs NO<sub>x</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.ii (a) + 1.c.ii (b), and then divide by 2000 lbs/ton.

iii. for particulates:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 7.6 lbs particulates (filterable)/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 2.0 lbs particulates/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iii (a) + 1.c.iii (b), and then divide by 2000 lbs/ton.

iv. for CO:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 84 lbs CO/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 5.0 lbs CO/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iv (a) + 1.c.iv (b), and then divide by 2000 lbs/ton.

- v. for OC:
- (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 11.0 lbs OC/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
  - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 0.556 lb OC/1000 gallons [from AP-42, Table 1.3-3 (revised 9/98)]; and
  - (c) add 1.c.v (a) + 1.c.v (b), and then divide by 2000 lbs/ton.

\* the sulfur content (in percent, by weight) of the No. 2 fuel oil (0.5%)

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 and the permittee's or oil supplier's analyses for sulfur content and heat content.
3. 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. At the end of each calendar month, the representative samples of oil from all the shipments of oil which were received during that calendar month shall each be combined (in proportion to the amount of oil received in each shipment) into one composite sample.

For each monthly composite sample, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 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 deviation (excursion) reports that identify all exceedances of the maximum annual fuel oil usage restriction and the fuel oil sulfur content (in percent, by weight) limitation. These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

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2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the annual no. 2 fuel oil gallon usage restriction. These reports shall be submitted within 30 days after the exceedance of the usage restriction.
3. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or no. 2 fuel oil combusted in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
 0.020 lb particulates/mmBtu of 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 AP-42, Table 1.4-2 ( revised 7/98) emission factor for natural gas (1.9 lbs particulates/mm cu. ft), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
 For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for No. 2 fuel oil (2.0 lbs particulates/1000 gallons), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
 If required, compliance shall be demonstrated in accordance with the methods in OAC rule 3745-17-03(B)(9).
  - b. Emission Limitation -  
 20% opacity, as a six-minute average  
  
 Applicable Compliance Method -  
 If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).
  - c. Emission Limitation -  
 18.6 TPY SO<sub>2</sub>, individual maximum for this emissions unit  
  
 Applicable Compliance Method -  
 Compliance shall be based upon the record keeping requirements in sections A.III.1, 2, and 3 of this permit.

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Emission Limitation -

113 TPY SO<sub>2</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 142 S lb SO<sub>2</sub>/1000 gallons, divided by 2000 lbs/ton.

- d. Emission Limitation -  
5.26 TPY NO<sub>x</sub>, individual maximum for this emissions unit

Applicable Compliance Method -

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

Emission Limitation -

31.8 TPY NO<sub>x</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 20 lbs NO<sub>x</sub>/ 1000 gallons, divided by 2000 lbs/ton.

- e. Emission Limitation -  
0.52 TPY particulates, individual maximum for this emissions unit

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

Emission Limitation -

3.2 TPY particulates, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 2.0 lbs/ 1000 gallons, divided by 2000 lbs/ton.

- f. Emission Limitation -  
4.26 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

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

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When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 142S lbs SO<sub>2</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 6.

- g. Emission Limitation -  
1.20 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO<sub>x</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- h. Emission Limitation -  
0.67 lb/hour CO

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5.0 lbs CO/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- i. Emission Limitation -  
2.94 TPY CO

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly CO rates for the calendar year.

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- j. Emission Limitation -  
0.09 lb/hour OC

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the AP-42, Table 1.4-2 (revised 7/98) emission factor of 11.0 lbs OC/mm cu. ft. by the maximum hourly fuel burning capacity (mm cu ft./hour) of the emissions unit.

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.556 lb OC/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- k. Emission Limitation -  
0.38 TPY OC

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly OC rates for the calendar year.

- l. Emission Limitation -  
3,182,400 gallons/year fuel usage for B007-B013, B015, B016 and B018, based upon a rolling 12 month summation of the fuel oil usage.

Applicable Compliance Method -

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

- m. Emission Limitation -  
0.5% (by weight) sulfur content for the No. 2 fuel oil

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in Sections A.III.2 and A.III.3 of this permit.

## VI. Miscellaneous Requirements

1. \*The Terms & Conditions in this PTI supercede PTI's 08-03544, issued 3-29-2001 (for B007-B013) and 08-03780, issued 11-3-99 (for B015 and B016) and represents the annual fuel oil usage limitation of 3,182,400 gal/yr for emissions units B007-B013, B015, B016 and B018 as a result of the addition of B018 to this permit.

**B. State Only Enforceable Section**

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

- 1. The specific operations(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 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>
B011 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

- 1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B012 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(A)
	OAC rule 3745-17-10(B)(1)	

Applicable Emissions  
Limitations/Control  
Measures

0.52 TPY particulates, the individual maximum for B012 and 3.2 TPY particulates, combined maximum for B007-13, B 015 , B016 and B018

4.26 lbs/hour and 18.6 TPY sulfur dioxide (SO<sub>2</sub>), the individual maximum for B012 and 113 TPYSO<sub>2</sub>, combined maximum for B007-13, B 015 , B016 and B018

1.20 lbs/hour and 5.26 TPY nitrogen oxides (NO<sub>x</sub>), the individual maximum for B012 and 31.8 TPY NO<sub>x</sub>, combined maximum for B007-13, B 015 , B016 and B018

0.67 lb/hour and 2.94 TPY carbon monoxide (CO)

0.09 lb/hour and 0.38 TPY organic compounds (OC)

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).

0.020 lb particulates/mmBtu

of actual heat input

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

## 2. Additional Terms and Conditions

**2.a** The 4.26 lbs/hour SO<sub>2</sub>, 1.20 lbs/hour NO<sub>x</sub>, 0.67 lb/hour CO, and 0.09 lb/hour OC allowable emission rates were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.

**2.b** The individual maximum annual No. 2 fuel oil usage is based on the potential to emit.

## II. Operational Restrictions

1. The maximum annual No. 2 fuel oil usage rate for the combined emissions units, B007-13, B015 , B016 and B018, shall not exceed 3,182,400 gallons, based upon a rolling 12 month summation of the fuel oil usage. The permittee has sufficient records to demonstrate compliance with this rolling summation such that a first 12 month cumulative table is not required.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
3. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The amount of fuel oil burned, in gallons.
  - b. The combined amount of fuel oil burned in gallons for B007-13, B015 , B016 and B018
  - c. The amount of natural gas burned, in mm cu. ft.
  - d. The SO<sub>2</sub>, NO<sub>x</sub>, particulates, CO, and OC emission rates, in tons, calculated as follows:
    - i. for SO<sub>2</sub>:
      - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
      - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from

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section 1.a) by the emission factor of 142S\* lbs SO<sub>2</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.i (a) + 1.c.i (b), and then divide by 2000 lbs/ton.

ii. for NO<sub>x</sub>:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 20.0 lbs NO<sub>x</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.ii (a) + 1.c.ii (b), and then divide by 2000 lbs/ton.

iii. for particulates:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 7.6 lbs particulates (filterable)/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 2.0 lbs particulates/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iii (a) + 1.c.iii (b), and then divide by 2000 lbs/ton.

iv. for CO:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 84 lbs CO/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 5.0 lbs CO/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iv (a) + 1.c.iv (b), and then divide by 2000 lbs/ton.

v. for OC:

- (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 11.0 lbs OC/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
- (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 0.556 lb OC/1000 gallons [from AP-42, Table 1.3-3 (revised 9/98)]; and
- (c) add 1.c.v (a) + 1.c.v (b), and then divide by 2000 lbs/ton.

\* the sulfur content (in percent, by weight) of the No. 2 fuel oil (0.5%)

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 and the permittee's or oil supplier's analyses for sulfur content and heat content.
3. 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. At the end of each calendar month, the representative samples of oil from all the shipments of oil which were received during that calendar month shall each be combined (in proportion to the amount of oil received in each shipment) into one composite sample.

For each monthly composite sample, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 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 deviation (excursion) reports that identify all exceedances of the maximum annual fuel oil usage restriction and the fuel oil sulfur content (in percent, by weight) limitation. These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

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2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the annual no. 2 fuel oil gallon usage restriction. These reports shall be submitted within 30 days after the exceedance of the usage restriction.
3. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or no. 2 fuel oil combusted in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

**V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.020 lb particulates/mmBtu of 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 AP-42, Table 1.4-2 ( revised 7/98) emission factor for natural gas (1.9 lbs particulates/mm cu. ft), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for No. 2 fuel oil (2.0 lbs particulates/1000 gallons), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
If required, compliance shall be demonstrated in accordance with the methods in OAC rule 3745-17-03(B)(9).
  - b. Emission Limitation -  
20% opacity, as a six-minute average  
  
Applicable Compliance Method -  
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).
  - c. Emission Limitation -  
18.6 TPY SO<sub>2</sub>, individual maximum for this emissions unit

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**Issued**

Facility ID: **0857040180**

Emissions Unit ID: B012

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in sections A.III.1, 2, and 3 of this permit.

Emission Limitation -

113 TPY SO<sub>2</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 142 S lb SO<sub>2</sub>/1000 gallons, divided by 2000 lbs/ton.

- d. Emission Limitation -  
5.26 TPY NO<sub>x</sub>, individual maximum for this emissions unit

Applicable Compliance Method -

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

Emission Limitation -

31.8 TPY NO<sub>x</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 20 lbs NO<sub>x</sub>/ 1000 gallons, divided by 2000 lbs/ton.

- e. Emission Limitation -  
0.52 TPY particulates, individual maximum for this emissions unit

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

Emission Limitation -

3.2 TPY particulates, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 2.0 lbs/ 1000 gallons, divided by 2000 lbs/ton.

- f. Emission Limitation -  
4.26 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 142S lbs SO<sub>2</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 6.

- g. Emission Limitation -  
1.20 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO<sub>x</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- h. Emission Limitation -  
0.67 lb/hour CO

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5.0 lbs CO/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- i. Emission Limitation -  
2.94 TPY CO

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PTI Application: **08 04202**  
**Issued**

Facility ID: **0857040180**

Emissions Unit ID: B012

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly CO rates for the calendar year.

- j. Emission Limitation -  
0.09 lb/hour OC

**Applicable Compliance Method -**

When burning natural gas, compliance may be determined by multiplying the AP-42, Table 1.4-2 (revised 7/98) emission factor of 11.0 lbs OC/mm cu. ft. by the maximum hourly fuel burning capacity (mm cu ft./hour) of the emissions unit.

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.556 lb OC/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- k. Emission Limitation -  
0.38 TPY OC

**Applicable Compliance Method -**

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly OC rates for the calendar year.

- l. Emission Limitation -  
3,182,400 gallons/year fuel usage for B007-B013, B015, B016 and B018, based upon a rolling 12 month summation of the fuel oil usage.

**Applicable Compliance Method -**

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

- m. Emission Limitation -  
0.5% (by weight) sulfur content for the No. 2 fuel oil

**Applicable Compliance Method -**

Compliance shall be based upon the record keeping requirements specified in Sections A.III.2 and A.III.3 of this permit.

**VI. Miscellaneous Requirements**

1. \*The Terms & Conditions in this PTI supercede PTI's 08-03544, issued 3-29-2001 (for B007-B013) and 08-03780, issued 11-3-99 (for B015 and B016) and represents the annual fuel oil usage limitation of 3,182,400 gal/yr for emissions units B007-B013, B015, B016 and B018 as a result of the addition of B018 to this permit.

**B. State Only Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
B012 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None



Applicable Emissions  
Limitations/Control  
Measures

minute average, except as provided by rule.

0.52 TPY particulates, the individual maximum for B013 and 3.2 TPY particulates, combined maximum for B007-13, B 015 , B016 and B018

4.26 lbs/hour and 18.6 TPY sulfur dioxide (SO2), the individual maximum for B013 and 113 TPYSO2, combined maximum for B007-13, B 015 , B016 and B018

1.20 lbs/hour and 5.26 TPY nitrogen oxides (NOx), the individual maximum for B013 and 31.8 TPY NOx, combined maximum for B007-13, B 015 , B016 and B018

0.67 lb/hour and 2.94 TPY carbon monoxide (CO)

0.09 lb/hour and 0.38 TPY organic compounds (OC)

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).

0.020 lb particulates/mmBtu of actual heat input

Visible emissions shall not exceed 20% opacity, as a six-

## 2. Additional Terms and Conditions

**2.a** The 4.26 lbs/hour SO<sub>2</sub>, 1.20 lbs/hour NO<sub>x</sub>, 0.67 lb/hour CO, and 0.09 lb/hour OC allowable emission rates were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.

**2.b** The individual maximum annual No. 2 fuel oil usage is based on the potential to emit.

## II. Operational Restrictions

1. The maximum annual No. 2 fuel oil usage rate for the combined emissions units, B007-13, B015 , B016 and B018, shall not exceed 3,182,400 gallons, based upon a rolling 12 month summation of the fuel oil usage. The permittee has sufficient records to demonstrate compliance with this rolling summation such that a first 12 month cumulative table is not required.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
3. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The amount of fuel oil burned, in gallons.
  - b. The combined amount of fuel oil burned in gallons for B007-13, B015 , B016 and B018
  - c. The amount of natural gas burned, in mm cu. ft.
  - d. The SO<sub>2</sub>, NO<sub>x</sub>, particulates, CO, and OC emission rates, in tons, calculated as follows:
    - i. for SO<sub>2</sub>:
      - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
      - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from

section 1.a) by the emission factor of 142S\* lbs SO<sub>2</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.i (a) + 1.c.i (b), and then divide by 2000 lbs/ton.

ii. for NO<sub>x</sub>:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 20.0 lbs NO<sub>x</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.ii (a) + 1.c.ii (b), and then divide by 2000 lbs/ton.

iii. for particulates:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 7.6 lbs particulates (filterable)/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 2.0 lbs particulates/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iii (a) + 1.c.iii (b), and then divide by 2000 lbs/ton.

iv. for CO:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 84 lbs CO/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 5.0 lbs CO/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iv (a) + 1.c.iv (b), and then divide by 2000 lbs/ton.

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Miami Valley Hospital  
PTI Application: **08 04307**  
**Issued**

Facility ID: **0857040180**

Emissions Unit ID: B013

- v. for OC:
- (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 11.0 lbs OC/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
  - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 0.556 lb OC/1000 gallons [from AP-42, Table 1.3-3 (revised 9/98)]; and
  - (c) add 1.c.v (a) + 1.c.v (b), and then divide by 2000 lbs/ton.

\* the sulfur content (in percent, by weight) of the No. 2 fuel oil (0.5%)

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 and the permittee's or oil supplier's analyses for sulfur content and heat content.
3. 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. At the end of each calendar month, the representative samples of oil from all the shipments of oil which were received during that calendar month shall each be combined (in proportion to the amount of oil received in each shipment) into one composite sample.

For each monthly composite sample, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 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 deviation (excursion) reports that identify all exceedances of the maximum annual fuel oil usage restriction and the fuel oil sulfur content (in percent, by weight) limitation. These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

**Issued: 7/23/2002**

2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the annual no. 2 fuel oil gallon usage restriction. These reports shall be submitted within 30 days after the exceedance of the usage restriction.
3. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or no. 2 fuel oil combusted in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

**V. Testing Requirements**

1. Compliance with the emission limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.020 lb particulates/mmBtu of 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 AP-42, Table 1.4-2 ( revised 7/98) emission factor for natural gas (1.9 lbs particulates/mm cu. ft), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for No. 2 fuel oil (2.0 lbs particulates/1000 gallons), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
If required, compliance shall be demonstrated in accordance with the methods in OAC rule 3745-17-03(B)(9).
  - b. Emission Limitation -  
20% opacity, as a six-minute average  
  
Applicable Compliance Method -  
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).
  - c. Emission Limitation -  
18.6 TPY SO<sub>2</sub>, individual maximum for this emissions unit

Miami Valley Hospital  
PTI Application: **08 04202**  
**Issued**

Facility ID: **0857040180**

Emissions Unit ID: B013

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in sections A.III.1, 2, and 3 of this permit.

Emission Limitation -

113 TPY SO<sub>2</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 142 S lb SO<sub>2</sub>/1000 gallons, divided by 2000 lbs/ton.

- d. Emission Limitation -  
5.26 TPY NO<sub>x</sub>, individual maximum for this emissions unit

Applicable Compliance Method -

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

Emission Limitation -

31.8 TPY NO<sub>x</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 20 lbs NO<sub>x</sub>/ 1000 gallons, divided by 2000 lbs/ton.

- e. Emission Limitation -  
0.52 TPY particulates, individual maximum for this emissions unit

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

Emission Limitation -

3.2 TPY particulates, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 2.0 lbs/ 1000 gallons, divided by 2000 lbs/ton.

- f. Emission Limitation -  
4.26 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 142S lbs SO<sub>2</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 6.

- g. Emission Limitation -  
1.20 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO<sub>x</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- h. Emission Limitation -  
0.67 lb/hour CO

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5.0 lbs CO/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- i. Emission Limitation -  
2.94 TPY CO

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly CO rates for the calendar year.

- j. Emission Limitation -  
0.09 lb/hour OC

**Applicable Compliance Method -**

When burning natural gas, compliance may be determined by multiplying the AP-42, Table 1.4-2 (revised 7/98) emission factor of 11.0 lbs OC/mm cu. ft. by the maximum hourly fuel burning capacity (mm cu ft./hour) of the emissions unit.

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.556 lb OC/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- k. Emission Limitation -  
0.38 TPY OC

**Applicable Compliance Method -**

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly OC rates for the calendar year.

- l. Emission Limitation -  
3,182,400 gallons/year fuel usage for B007-B013, B015, B016 and B018, based upon a rolling 12 month summation of the fuel oil usage.

**Applicable Compliance Method -**

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

- m. Emission Limitation -  
0.5% (by weight) sulfur content for the No. 2 fuel oil

**Applicable Compliance Method -**

Compliance shall be based upon the record keeping requirements specified in Sections A.III.2 and A.III.3 of this permit.

**VI. Miscellaneous Requirements**

1. \*The Terms & Conditions in this PTI supercede PTI's 08-03544, issued 3-29-2001 (for B007-B013) and 08-03780, issued 11-3-99 (for B015 and B016) and represents the annual fuel oil usage limitation of 3,182,400 gal/yr for emissions units B007-B013, B015, B016 and B018 as a result of the addition of B018 to this permit.

**B. State Only Enforceable Section**

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

1. The specific operations(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 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>
B013 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B015 - 8.46 MMBtu/hr Natural gas/Oil fired Boiler	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-10(B)(1)
		OAC rule 3745-17-07(A)

Applicable Emissions  
Limitations/Control  
Measures

0.52 TPY particulates, the individual maximum for B015 and 3.2 TPY particulates, combined maximum for B007-13, B 015 , B016 and B018

4.26 lbs/hour and 18.6 TPY sulfur dioxide (SO<sub>2</sub>), the individual maximum for B015 and 113 TPYSO<sub>2</sub>, combined maximum for B007-13, B 015 , B016 and B018

1.20 lbs/hour and 5.26 TPY nitrogen oxides (NO<sub>x</sub>), the individual maximum for B015 and 31.8 TPY NO<sub>x</sub>, combined maximum for B007-13, B 015 , B016 and B018

0.67 lb/hour and 2.94 TPY carbon monoxide (CO)

0.09 lb/hour and 0.38 TPY organic compounds (OC)

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).

0.020 lb particulates/mmBtu

of actual heat input

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

Emissions Unit ID: B015

## 2. Additional Terms and Conditions

2.a The 4.26 lbs/hour SO<sub>2</sub>, 1.20 lbs/hour NO<sub>x</sub>, 0.67 lb/hour CO, and 0.09 lb/hour OC allowable emission rates were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.

2.b The individual maximum annual No. 2 fuel oil usage is based on the potential to emit.

## II. Operational Restrictions

1. The maximum annual No. 2 fuel oil usage rate for the combined emissions units, B007-13, B015, B016 and B018, shall not exceed 3,182,400 gallons, based upon a rolling 12 month summation of the fuel oil usage. The permittee has sufficient records to demonstrate compliance with this rolling summation such that a first 12 month cumulative table is not required.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
3. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The amount of fuel oil burned, in gallons.
  - b. The combined amount of fuel oil burned in gallons for B007-13, B015, B016 and B018
  - c. The amount of natural gas burned, in mm cu. ft.
  - d. The SO<sub>2</sub>, NO<sub>x</sub>, particulates, CO, and OC emission rates, in tons, calculated as follows:
    - i. for SO<sub>2</sub>:
      - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
      - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 142S\* lbs SO<sub>2</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and
      - (c) add 1.c.i (a) + 1.c.i (b), and then divide by 2000 lbs/ton.

- ii. for NO<sub>x</sub>:
  - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
  - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 20.0 lbs NO<sub>x</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and
  - (c) add 1.c.ii (a) + 1.c.ii (b), and then divide by 2000 lbs/ton.
- iii. for particulates:
  - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 7.6 lbs particulates (filterable)/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
  - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 2.0 lbs particulates/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and
  - (c) add 1.c.iii (a) + 1.c.iii (b), and then divide by 2000 lbs/ton.
- iv. for CO:
  - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 84 lbs CO/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
  - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 5.0 lbs CO/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and
  - (c) add 1.c.iv (a) + 1.c.iv (b), and then divide by 2000 lbs/ton.

- v. for OC:
- (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 11.0 lbs OC/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
  - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 0.556 lb OC/1000 gallons [from AP-42, Table 1.3-3 (revised 9/98)]; and
  - (c) add 1.c.v (a) + 1.c.v (b), and then divide by 2000 lbs/ton.

\* the sulfur content (in percent, by weight) of the No. 2 fuel oil (0.5%)

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 and the permittee's or oil supplier's analyses for sulfur content and heat content.
3. 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. At the end of each calendar month, the representative samples of oil from all the shipments of oil which were received during that calendar month shall each be combined (in proportion to the amount of oil received in each shipment) into one composite sample.

For each monthly composite sample, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 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 deviation (excursion) reports that identify all exceedances of the maximum annual fuel oil usage restriction and the fuel oil sulfur content (in percent, by weight) limitation. These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

**Issued**

Emissions Unit ID: B015

2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the annual no. 2 fuel oil gallon usage restriction. These reports shall be submitted within 30 days after the exceedance of the usage restriction.
3. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or no. 2 fuel oil combusted in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

**V. Testing Requirements**

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

- a. Emission Limitation -  
0.020 lb particulates/mmBtu of 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 AP-42, Table 1.4-2 ( revised 7/98) emission factor for natural gas (1.9 lbs particulates/mm cu. ft), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for No. 2 fuel oil (2.0 lbs particulates/1000 gallons), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).

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

- b. Emission Limitation -  
20% opacity, as a six-minute average

## Applicable Compliance Method -

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

- c. Emission Limitation -  
18.6 TPY SO<sub>2</sub>, individual maximum for this emissions unit

## Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in sections A.III.1, 2, and 3 of this permit.

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Miami Valley Hospital  
PTI Application: **08 04307**  
**Issued**

Facility ID: **0857040180**

Emissions Unit ID: B015

Emission Limitation -  
113 TPY SO<sub>2</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 142 S lb SO<sub>2</sub>/1000 gallons, divided by 2000 lbs/ton.

- d. Emission Limitation -  
5.26 TPY NO<sub>x</sub>, individual maximum for this emissions unit

Applicable Compliance Method -

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

Emission Limitation -

31.8 TPY NO<sub>x</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 20 lbs NO<sub>x</sub>/ 1000 gallons, divided by 2000 lbs/ton.

- e. Emission Limitation -  
0.52 TPY particulates, individual maximum for this emissions unit

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

Emission Limitation -

3.2 TPY particulates, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 2.0 lbs/ 1000 gallons, divided by 2000 lbs/ton.

- f. Emission Limitation -  
4.26 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 142S lbs SO<sub>2</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 6.

- g. Emission Limitation -  
1.20 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO<sub>x</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- h. Emission Limitation -  
0.67 lb/hour CO

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5.0 lbs CO/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- i. Emission Limitation -  
2.94 TPY CO

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**Issued: 7/23/2002**

Emissions Unit ID: B015

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly CO rates for the calendar year.

- j. Emission Limitation -  
0.09 lb/hour OC

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the AP-42, Table 1.4-2 (revised 7/98) emission factor of 11.0 lbs OC/mm cu. ft. by the maximum hourly fuel burning capacity (mm cu ft./hour) of the emissions unit.

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.556 lb OC/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- k. Emission Limitation -  
0.38 TPY OC

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly OC rates for the calendar year.

- l. Emission Limitation -  
3,182,400 gallons/year fuel usage for B007-B013, B015, B016 and B018, based upon a rolling 12 month summation of the fuel oil usage.

Applicable Compliance Method -

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

- m. Emission Limitation -  
0.5% (by weight) sulfur content for the No. 2 fuel oil

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in Sections A.III.2 and A.III.3 of this permit.

## VI. Miscellaneous Requirements

1. \*The Terms & Conditions in this PTI supercede PTI's 08-03544, issued 3-29-2001 (for B007-B013) and 08-03780, issued 11-3-99 (for B015 and B016) and represents the annual fuel oil usage limitation of 3,182,400 gal/yr for emissions units B007-B013, B015, B016 and B018 as

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PTI Application: **08 04303**

**Issued**

Facility ID: **0857040180**

Emissions Unit ID: B015

a result of the addition of B018 to this permit.

**B. State Only Enforceable Section**

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

1. The specific operations(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 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>
B015 - 8.46 MMBtu/hr Natural gas/Oil fired Boiler		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

1. The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B016 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-10(B)(1)
		OAC rule 3745-17-07(A)

Applicable Emissions  
Limitations/Control  
Measures

0.52 TPY particulates, the individual maximum for B016 and 3.2 TPY particulates, combined maximum for B007-13, B 015 , B016 and B018

4.26 lbs/hour and 18.6 TPY sulfur dioxide (SO<sub>2</sub>), the individual maximum for B016 and 113 TPYSO<sub>2</sub>, combined maximum for B007-13, B015 , B016 and B018

1.20 lbs/hour and 5.26 TPY nitrogen oxides (NO<sub>x</sub>), the individual maximum for B016 and 31.8 TPY NO<sub>x</sub>, combined maximum for B007-13, B 015 , B016 and B018

0.67 lb/hour and 2.94 TPY carbon monoxide (CO)

0.09 lb/hour and 0.38 TPY organic compounds (OC)

The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).

0.020 lb particulates/mmBtu

of actual heat input

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

## 2. Additional Terms and Conditions

**2.a** The 4.26 lbs/hour SO<sub>2</sub>, 1.20 lbs/hour NO<sub>x</sub>, 0.67 lb/hour CO, and 0.09 lb/hour OC allowable emission rates were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.

**2.b** The individual maximum annual No. 2 fuel oil usage is based on the potential to emit.

## II. Operational Restrictions

1. The maximum annual No. 2 fuel oil usage rate for the combined emissions units, B007-13, B015, B016 and B018, shall not exceed 3,182,400 gallons, based upon a rolling 12 month summation of the fuel oil usage. The permittee has sufficient records to demonstrate compliance with this rolling summation such that a first 12 month cumulative table is not required.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
3. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The amount of fuel oil burned, in gallons.
  - b. The combined amount of fuel oil burned in gallons for B007-13, B015, B016 and B018
  - c. The amount of natural gas burned, in mm cu. ft.
  - d. The SO<sub>2</sub>, NO<sub>x</sub>, particulates, CO, and OC emission rates, in tons, calculated as follows:
    - i. for SO<sub>2</sub>:
      - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
      - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from

Emissions Unit ID: B016

section 1.a) by the emission factor of 142S\* lbs SO<sub>2</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.i (a) + 1.c.i (b), and then divide by 2000 lbs/ton.

ii. for NO<sub>x</sub>:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 20.0 lbs NO<sub>x</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.ii (a) + 1.c.ii (b), and then divide by 2000 lbs/ton.

iii. for particulates:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 7.6 lbs particulates (filterable)/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 2.0 lbs particulates/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iii (a) + 1.c.iii (b), and then divide by 2000 lbs/ton.

iv. for CO:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 84 lbs CO/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 5.0 lbs CO/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iv (a) + 1.c.iv (b), and then divide by 2000 lbs/ton.

v. for OC:

- (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 11.0 lbs OC/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
- (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 0.556 lb OC/1000 gallons [from AP-42, Table 1.3-3 (revised 9/98)]; and
- (c) add 1.c.v (a) + 1.c.v (b), and then divide by 2000 lbs/ton.

\* the sulfur content (in percent, by weight) of the No. 2 fuel oil (0.5%)

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 and the permittee's or oil supplier's analyses for sulfur content and heat content.
3. 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. At the end of each calendar month, the representative samples of oil from all the shipments of oil which were received during that calendar month shall each be combined (in proportion to the amount of oil received in each shipment) into one composite sample.

For each monthly composite sample, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 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 deviation (excursion) reports that identify all exceedances of the maximum annual fuel oil usage restriction and the fuel oil sulfur content (in percent, by weight) limitation. These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

Emissions Unit ID: B016

2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the annual no. 2 fuel oil gallon usage restriction. These reports shall be submitted within 30 days after the exceedance of the usage restriction.
3. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or no. 2 fuel oil combusted in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.020 lb particulates/mmBtu of 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 AP-42, Table 1.4-2 ( revised 7/98) emission factor for natural gas (1.9 lbs particulates/mm cu. ft), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
 For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for No. 2 fuel oil (2.0 lbs particulates/1000 gallons), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
 If required, compliance shall be demonstrated in accordance with the methods in OAC rule 3745-17-03(B)(9).
  - b. Emission Limitation -  
20% opacity, as a six-minute average  
  
 Applicable Compliance Method -  
 If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).
  - c. Emission Limitation -  
18.6 TPY SO<sub>2</sub>, individual maximum for this emissions unit  
  
 Applicable Compliance Method -  
 Compliance shall be based upon the record keeping requirements in sections A.III.1, 2, and 3 of this permit.

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**Issued: 7/23/2002**

Emissions Unit ID: B016

Emission Limitation -

113 TPY SO<sub>2</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 142 S lb SO<sub>2</sub>/1000 gallons, divided by 2000 lbs/ton.

- d. Emission Limitation -  
5.26 TPY NO<sub>x</sub>, individual maximum for this emissions unit

Applicable Compliance Method -

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

Emission Limitation -

31.8 TPY NO<sub>x</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 20 lbs NO<sub>x</sub>/ 1000 gallons, divided by 2000 lbs/ton.

- e. Emission Limitation -  
0.52 TPY particulates, individual maximum for this emissions unit

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

Emission Limitation -

3.2 TPY particulates, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 2.0 lbs/ 1000 gallons, divided by 2000 lbs/ton.

- f. Emission Limitation -  
4.26 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

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

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When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 142S lbs SO<sub>2</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 6.

- g. Emission Limitation -  
1.20 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO<sub>x</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- h. Emission Limitation -  
0.67 lb/hour CO

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5.0 lbs CO/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- i. Emission Limitation -  
2.94 TPY CO

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly CO rates for the calendar year.

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**Issued: 7/23/2002**

Emissions Unit ID: B016

- j. Emission Limitation -  
0.09 lb/hour OC

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the AP-42, Table 1.4-2 (revised 7/98) emission factor of 11.0 lbs OC/mm cu. ft. by the maximum hourly fuel burning capacity (mm cu ft./hour) of the emissions unit.

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.556 lb OC/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- k. Emission Limitation -  
0.38 TPY OC

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly OC rates for the calendar year.

- l. Emission Limitation -  
3,182,400 gallons/year fuel usage for B007-B013, B015, B016 and B018, based upon a rolling 12 month summation of the fuel oil usage.

Applicable Compliance Method -

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

- m. Emission Limitation -  
0.5% (by weight) sulfur content for the No. 2 fuel oil

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in Sections A.III.2 and A.III.3 of this permit.

## VI. Miscellaneous Requirements

1. \*The Terms & Conditions in this PTI supercede PTI's 08-03544, issued 3-29-2001 (for B007-B013) and 08-03780, issued 11-3-99 (for B015 and B016) and represents the annual fuel oil usage limitation of 3,182,400 gal/yr for emissions units B007-B013, B015, B016 and B018 as a result of the addition of B018 to this permit.

**B. State Only Enforceable Section**

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

- 1. The specific operations(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 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>
B016 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

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

- The specific operations(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 specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
B018 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07(A)
	OAC rule 3745-17-10(B)(1)	

Applicable Emissions Limitations/Control Measures	0.020 lb particulates/mmBtu of actual heat input
0.52 TPY particulates, the individual maximum for B018 and 3.2 TPY particulates, combined maximum for B007-13, B 015 , B016 and B018	Visible emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
4.26 lbs/hour and 18.6 TPY sulfur dioxide (SO <sub>2</sub> ), the individual maximum for B018 and 113 TPYSO <sub>2</sub> , combined maximum for B007-13, B 015 , B016 and B018	
1.20 lbs/hour and 5.26 TPY nitrogen oxides (NO <sub>x</sub> ), the individual maximum for B018 and 31.8 TPY NO <sub>x</sub> , combined maximum for B007-13, B 015 , B016 and B018	
0.67 lb/hour and 2.94 TPY carbon monoxide (CO)	
0.09 lb/hour and 0.38 TPY organic compounds (OC)	
The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).	

## 2. Additional Terms and Conditions

**2.a** The 4.26 lbs/hour SO<sub>2</sub>, 1.20 lbs/hour NO<sub>x</sub>, 0.67 lb/hour CO, and 0.09 lb/hour OC allowable emission rates were established for PTI purposes to reflect the potentials to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.

**2.b** The individual maximum annual No. 2 fuel oil usage is based on the potential to emit.

## II. Operational Restrictions

1. The maximum annual No. 2 fuel oil usage rate for the combined emissions units, B007-13, B015 , B016 and B018, shall not exceed 3,182,400 gallons, based upon a rolling 12 month summation of the fuel oil usage. The permittee has sufficient records to demonstrate compliance with this rolling summation such that a first 12 month cumulative table is not required.
2. The maximum sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
3. The permittee shall burn only natural gas and/or No. 2 fuel oil in this emissions unit.

## III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The amount of fuel oil burned, in gallons.
  - b. The combined amount of fuel oil burned in gallons for B007-13, B015 , B016 and B018
  - c. The amount of natural gas burned, in mm cu. ft.
  - d. The SO<sub>2</sub>, NO<sub>x</sub>, particulates, CO, and OC emission rates, in tons, calculated as follows:
    - i. for SO<sub>2</sub>:
      - (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 0.6 lb SO<sub>2</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
      - (b) multiply the total amount of No. 2 oil burned (in gallons/month, from

Emissions Unit ID: B018

section 1.a) by the emission factor of 142S\* lbs SO<sub>2</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.i (a) + 1.c.i (b), and then divide by 2000 lbs/ton.

ii. for NO<sub>x</sub>:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 100 lbs NO<sub>x</sub>/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 20.0 lbs NO<sub>x</sub>/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.ii (a) + 1.c.ii (b), and then divide by 2000 lbs/ton.

iii. for particulates:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 7.6 lbs particulates (filterable)/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 2.0 lbs particulates/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iii (a) + 1.c.iii (b), and then divide by 2000 lbs/ton.

iv. for CO:

(a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 84 lbs CO/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];

(b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 5.0 lbs CO/1000 gallons [from AP-42, Table 1.3-1 (revised 9/98)]; and

(c) add 1.c.iv (a) + 1.c.iv (b), and then divide by 2000 lbs/ton.

v. for OC:

- (a) multiply the total amount of natural gas burned (in mm cu.ft./month, from section 1.b) by the emission factor of 11.0 lbs OC/mm cu. ft [from AP-42, Table 1.4-2 (revised 7/98)];
- (b) multiply the total amount of No. 2 oil burned (in gallons/month, from section 1.a) by the emission factor of 0.556 lb OC/1000 gallons [from AP-42, Table 1.3-3 (revised 9/98)]; and
- (c) add 1.c.v (a) + 1.c.v (b), and then divide by 2000 lbs/ton.

\* the sulfur content (in percent, by weight) of the No. 2 fuel oil (0.5%)

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 and the permittee's or oil supplier's analyses for sulfur content and heat content.
3. 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. At the end of each calendar month, the representative samples of oil from all the shipments of oil which were received during that calendar month shall each be combined (in proportion to the amount of oil received in each shipment) into one composite sample.

For each monthly composite sample, the permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

4. For each day during which the permittee burns a fuel other than natural gas and/or No. 2 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 deviation (excursion) reports that identify all exceedances of the maximum annual fuel oil usage restriction and the fuel oil sulfur content (in percent, by weight) limitation. These reports are due by the date prescribed in Part I - General Terms and Conditions of this permit under section (A)(1).

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2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the annual no. 2 fuel oil gallon usage restriction. These reports shall be submitted within 30 days after the exceedance of the usage restriction.
3. The permittee shall submit deviation (excursion) reports that identify each day during which records were not maintained on the amount of natural gas or no. 2 fuel oil combusted in the emissions unit. These reports shall be submitted within 30 days after the deviation occurs.

## V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I.1. of these terms and conditions shall be determined in accordance with the following method(s):
  - a. Emission Limitation -  
0.020 lb particulates/mmBtu of 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 AP-42, Table 1.4-2 ( revised 7/98) emission factor for natural gas (1.9 lbs particulates/mm cu. ft), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
For the use of No. 2 fuel oil, compliance may be determined by multiplying the maximum fuel oil capacity of the emissions unit (gallons/hour) by the AP-42, Table 1.3-1 (revised 9/98) emission factor for No. 2 fuel oil (2.0 lbs particulates/1000 gallons), and then dividing by the maximum hourly heat input capacity of the emissions unit (mmBtu/hour).  
  
If required, compliance shall be demonstrated in accordance with the methods in OAC rule 3745-17-03(B)(9).
  - b. Emission Limitation -  
20% opacity, as a six-minute average  
  
Applicable Compliance Method -  
If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1).
  - c. Emission Limitation -  
18.6 TPY SO<sub>2</sub>, individual maximum for this emissions unit

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Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in sections A.III.1, 2, and 3 of this permit.

Emission Limitation -

113 TPY SO<sub>2</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 142 S lb SO<sub>2</sub>/1000 gallons, divided by 2000 lbs/ton.

- d. Emission Limitation -  
5.26 TPY NO<sub>x</sub>, individual maximum for this emissions unit

Applicable Compliance Method -

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

Emission Limitation -

31.8 TPY NO<sub>x</sub>, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 20 lbs NO<sub>x</sub>/ 1000 gallons, divided by 2000 lbs/ton.

- e. Emission Limitation -  
0.52 TPY particulates, individual maximum for this emissions unit

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly PE rates for the calendar year.

Emission Limitation -

3.2 TPY particulates, combined maximum for B007- B013, B015, B016 and B018

Applicable Compliance Method -

Compliance shall be based upon the sum of the combined fuel usage rate for 12 months multiplied by the emission factor of 2.0 lbs/ 1000 gallons, divided by 2000 lbs/ton.

- f. Emission Limitation -  
4.26 lbs/hour SO<sub>2</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 142S lbs SO<sub>2</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 6.

- g. Emission Limitation -  
1.20 lbs/hour NO<sub>x</sub>

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 20 lbs NO<sub>x</sub>/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 7.

- h. Emission Limitation -  
0.67 lb/hour CO

Applicable Compliance Method -

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

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-1 (revised 9/98) emission factor of 5.0 lbs CO/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 10.

- i. Emission Limitation -  
2.94 TPY CO

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly CO rates for the calendar year.

- j. Emission Limitation -  
0.09 lb/hour OC

Applicable Compliance Method -

When burning natural gas, compliance may be determined by multiplying the AP-42, Table 1.4-2 (revised 7/98) emission factor of 11.0 lbs OC/mm cu. ft. by the maximum hourly fuel burning capacity (mm cu ft./hour) of the emissions unit.

When burning No. 2 fuel oil, compliance may be determined by multiplying the AP-42, Table 1.3-3 (revised 9/98) emission factor of 0.556 lb OC/1000 gallons of fuel oil by the maximum hourly fuel burning capacity (gallons/hour) of the emissions unit.

If required, the permittee shall demonstrate compliance in accordance with 40 CFR, Part 60, Appendix A, Method 25.

- k. Emission Limitation -  
0.38 TPY OC

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements in section A.III.1 of this permit and shall be the summation of the 12 monthly OC rates for the calendar year.

- l. Emission Limitation -  
3,182,400 gallons/year fuel usage for B007-B013, B015, B016 and B018, based upon a rolling 12 month summation of the fuel oil usage.

Applicable Compliance Method -

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

- m. Emission Limitation -  
0.5% (by weight) sulfur content for the No. 2 fuel oil

Applicable Compliance Method -

Compliance shall be based upon the record keeping requirements specified in Sections A.III.2 and A.III.3 of this permit.

## VI. Miscellaneous Requirements

None

**B. State Only Enforceable Section****I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(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 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>
B018 - 8.46 mmBtu/hr Natural gas/Oil fired Boiler		

**2. Additional Terms and Conditions**

2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

None

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None