



State of Ohio Environmental Protection Agency

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

CERTIFIED MAIL

Street Address:

122 S. Front Street

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

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 02-21970

Fac ID: 0247101010

DATE: 7/20/2006

Green Circle Growers
John Van Wingerden
15650 State Route 511
Oberlin, OH 44074

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

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

CC: USEPA

NEDO



**Permit To Install
Terms and Conditions**

**Issue Date: 7/20/2006
Effective Date: 7/20/2006**

FINAL PERMIT TO INSTALL 02-21970

Application Number: 02-21970
Facility ID: 0247101010
Permit Fee: **\$5600**
Name of Facility: Green Circle Growers
Person to Contact: John Van Wingerden
Address: 15650 State Route 511
Oberlin, OH 44074

Location of proposed air contaminant source(s) [emissions unit(s)]:
**15650 State Route 511
Oberlin, Ohio**

Description of proposed emissions unit(s):
12.6 mmBtu/hr wood 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. 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

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping 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 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. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

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the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. 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.

7. 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.

8. 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.

9. Construction of New Sources(s)

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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.

10. 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.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. 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.

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13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This 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 ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. 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.

15. 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.

B. 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>
PE	40.16
TOC	4.27
NOx	56.9
CO	99.9
SO2	58.1

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PTI A

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Emissions Unit ID: B001

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. 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>
B001 - Fire tube boiler rated 12.6 MMBTU (C1). North American, AB-6121-12.6-D20-FM, 1971. Plant 1. Burning natural gas and on spec. waste oil.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc
The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06.	OAC rule 3745-17-10(B)(1)
	OAC rule 3745-18-06(D)
	OAC rule 3745-21-08(B)
	OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)

OAC rule 3745-31-05(C)

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.334 lb/mmBtu when burning on-spec used oil.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NO_x) emissions shall not exceed 0.136 lb/mmBtu .

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu .

Sulfur dioxide (SO₂) emissions shall not exceed 0.529 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and 3745-17-10(B)(1).

See term A.I.2.f.

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning natural gas the emissions unit shall not emit more than 0.02 lbs/mmBtu particulate matter.

When burning used oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.I.2.c.

See term A.I.2.e.

PE* shall not exceed 2.41 TPY on a rolling twelve month basis.
NO_x shall not exceed 1.43 TPY on a rolling twelve month basis.
SO₂ shall not exceed 3.74 TPY on a rolling twelve month basis.
CO shall not exceed 0.64 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10

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microns in diameter (PM10).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or on-spec. used oil, a sulfur content limitation for on-spec. used oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

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

- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, B.5, C.3, and D.5.

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- 2.f** All used oil burned in this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 ppm maximum*
PCB's	less than 2 ppm
flash point	100°F, minimum;

and shall also not exceed the following mercury limitations nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter.

B. Operational Restrictions

1. The permittee shall burn only natural gas or on-spec used oil in this emissions unit.
2. The quality of on-spec used oil received for burning in this emissions unit shall have a sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.529 lb/mmBtu of actual heat input and the sulfur content limitation for on-spec used oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 8,930 MCF. The maximum rolling twelve month on-spec used oil usage

rate for this emissions unit shall not exceed 101,802 gallons.

4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural gas usage upon issuance of this permit.
5. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the permittee shall not exceed the used oil burned limitations specified in the following table:

Month	Maximum Allowable Used Oil Burned (B001) (gallons)
1	8,483
1 - 2	16,967
1 - 3	25,449
1 - 4	33,932
1 - 5	42,415
1 - 6	50,898
1 - 7	59,381
1 - 8	67,864
1 - 9	76,347
1 - 10	84,830
1 - 11	93,313
1 - 12	101,802

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual used oil burned limitation shall be based upon a rolling, 12-month summation of used oil burned, in gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of used oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be

Emissions Unit ID: **B001**

calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

- b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
 3. The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (MCF) burned in this emissions unit.
 - b. The total number of gallons of on-spec used oil burned in this emissions unit.
 - c. The amount of PE, NO_x, SO₂, and CO.
 - d. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the cumulative used oil amounts.
 - e. The total summation of the amount of natural gas fuel used per rolling twelve months.
 - f. Beginning after the first 12 calendar months of operation while burning used oil following the issuance of this permit, the number of gallons of used oil used per rolling twelve months.
 4. The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
 - c. the results of the chemical analyses demonstrating the used oil meets the standards in OAC 3745-279-11, including:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;

- iv. the lead content, in ppm;
 - v. total halogens, in ppm;
 - vi. the PCB content, in ppm; and
 - vi. the flash point
- d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-63 (B); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 3 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (Northeast District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel

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burned in this emissions unit other than natural gas or on-spec used oil meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and on-spec used oil usage limitations.

The permittee shall submit deviation (excursion) reports that identify all exceedances of the maximum allowable cumulative on-spec used oil limitation listed in term B.5 for the first 12 calendar months of operation while burning used oil.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Northeast District Office), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
7. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of on-spec used oil which is received for burning in this emissions unit. Also, if no on-spec is received during the quarter, a letter stating this shall be submitted. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);

- b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and,
- c. The weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the used oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation(s):
0.334 lb/mmBtu, 2.41 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 46.72 lbs PE/10³ gallons emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 46.72 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-1 (9/96) (for used oil combustion). Emission factor 64*A, where "A" is the percent ash in the fuel, average taken as 0.73.

The calculated annual PE emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual PE

Emissions Unit ID: **B001**

emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
 0.011 lb/mmBtu, 0.10 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 1.0 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-3 (9/96) (for used oil combustion).

The calculated annual TOC emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
 0.136 lb/mmBtu, 1.43 TPY NOx emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 19 lbs NOx/10³ gal emission factor into lbs NOx/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 19 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual NO_x emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 0.64 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 5 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual CO emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

- e. Emission Limitation(s):
0.529 lb/mmBtu, 3.74 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 74 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 74 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion). Emission factor 147*S, where "S" is the percent sulfur in the fuel with a required minimum of 0.5.

The calculated annual SO₂ emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described in section C.

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas and compliant on-spec used oil.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>
B002 - Fire tube boiler rated 21 MMBTU (C2). Superior Boiler 4-5-2506. 1971. Plant 1. Burning natural gas and on spec. waste oil. The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc OAC rule 3745-17-10(B)(1) OAC rule 3745-18-06(D) OAC rule 3745-21-08(B) OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)

OAC rule 3745-31-05(C)

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.334 lb/mmBtu when burning on-spec used oil.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NOx) emissions shall not exceed 0.136 lb/mmBtu.

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.529 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and

3745-17-10(B)(1).

See term A.I.2.f.

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning natural gas the emissions unit shall not emit more than 0.02 lbs/mmBtu particulate matter.

When burning used oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.I.2.c.

See term A.I.2.e.

PE* shall not exceed 4.02 TPY on a rolling twelve month basis.
NOx shall not exceed 2.38 TPY on a rolling twelve month basis.
SO₂ shall not exceed 6.24 TPY on a rolling twelve month basis.
CO shall not exceed 1.07 TPY on a rolling twelve month basis.

*for purposes of PSD and

Green Circle Growers
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Facility ID: 0247101010

Emissions Unit ID: B002

nonattainment review all PE is
particulate matter less than 10
microns in diameter (PM10).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or on-spec. used oil, a sulfur content limitation for on-spec. used oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.d** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revisions occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, B.5, C.3, and D.5.

- 2.f** All used oil burned in this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 ppm maximum*
PCB's	less than 2 ppm
flash point	100°F, minimum;

and shall also not exceed the following mercury limitations nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter.

B. Operational Restrictions

1. The permittee shall burn only natural gas or on-spec used oil in this emissions unit.
2. The quality of on-spec used oil received for burning in this emissions unit shall have a sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.529 lb/mmBtu of actual heat input and the sulfur content limitation for on-spec used oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 14,883 MCF. The maximum rolling twelve month on-spec used oil usage

rate for this emissions unit shall not exceed 169,587 gallons.

4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural gas usage upon issuance of this permit.
5. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the permittee shall not exceed the used oil burned limitations specified in the following table:

Month	Maximum Allowable Used Oil Burned (B002) (gallons)
1	14,132
1 - 2	28,265
1 - 3	42,396
1 - 4	56,528
1 - 5	70,660
1 - 6	84,792
1 - 7	98,924
1 - 8	113,056
1 - 9	127,188
1 - 10	141,320
1 - 11	155,452
1 - 12	169,587

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual used oil burned limitation shall be based upon a rolling, 12-month summation of used oil burned, in gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of used oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same

supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

- b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
 3. The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (MCF) burned in this emissions unit.
 - b. The total number of gallons of on-spec used oil burned in this emissions unit.
 - c. The amount of PE, NO_x, SO₂, and CO.
 - d. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the cumulative used oil amounts.
 - e. The total summation of the amount of natural gas fuel used per rolling twelve months.
 - f. Beginning after the first 12 calendar months of operation while burning used oil following the issuance of this permit, the number of gallons of used oil used per rolling twelve months.
 4. The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
 - c. the results of the chemical analyses demonstrating the used oil meets the standards in OAC 3745-279-11, including:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;
 - iv. the lead content, in ppm;

- v. total halogens, in ppm; and
 - vi. the flash point
- d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-63 (B); and
 - e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 3 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (Northeast District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
 DAPC - Permit Management Unit
 P.O. Box 163669
 Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or on-spec used oil meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and on-spec used oil usage limitations.

The permittee shall submit deviation (excursion) reports that identify all exceedances of the maximum allowable cumulative on-spec used oil limitation listed in term B.5 for the first 12 calendar months of operation while burning used oil.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Northeast District Office), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
7. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of on-spec used oil which is received for burning in this emissions unit. Also, if no on-spec is received during the quarter, a letter stating this shall be submitted. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and,

- c. The weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the used oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
 0.334 lb/mmBtu, 4.02 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 46.72 lbs PE/10³ gallons emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gallons.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 46.72 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-1 (9/96) (for used oil combustion). Emission factor 64*A, where "A" is the percent ash in the fuel, average taken as 0.73.

The calculated annual PE emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.17 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 1.0 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-3 (9/96) (for used oil combustion).

The calculated annual TOC emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.136 lb/mmBtu, 2.38 TPY NO_x emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 19 lbs NO_x/10³ gal emission factor into lbs NO_x/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation

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of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 19 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual NO_x emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 1.07 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 5 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual CO emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

- e. Emission Limitation(s):
0.529 lb/mmBtu, 6.24 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 74 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 74 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion). Emission factor 147*S, where "S" is the percent sulfur in the fuel with a required minimum of 0.5.

The calculated annual SO₂ emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described in section C.

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Facility ID: 0247101010

Emissions Unit ID: B002

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas and compliant on-spec used oil.

Greer

PTI A

Issued: 7/20/2006

Emissions Unit ID: B003

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. 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>
B003 - Fire tube boiler rated 21 MMBTU (C3). North American Boiler AB-6121-21.0-E25-UV-FM. 1968. Plant 1. Burning natural gas and on spec. waste oil.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc
The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06	OAC rule 3745-17-10(B)(1)
	OAC rule 3745-18-06(D)
	OAC rule 3745-21-08(B)
	OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)

OAC rule 3745-31-05(C)

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.334 lb/mmBtu when burning on-spec used oil.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NO_x) emissions shall not exceed 0.136 lb/mmBtu.

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.529 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and 3745-17-10(B)(1).

See term A.I.2.f.

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning natural gas the emissions unit shall not emit more than 0.02 lbs/mmBtu particulate matter.

When burning used oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.I.2.c.

See term A.I.2.e.

PE* shall not exceed 4.02 TPY on a rolling twelve month basis.
NO_x shall not exceed 2.38 TPY on a rolling twelve month basis.
SO₂ shall not exceed 6.24 TPY on a rolling twelve month basis.
CO shall not exceed 1.07 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10

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Greer

PTI A

Issued: 7/20/2006

Emissions Unit ID: **B003**

microns in diameter (PM10).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or on-spec. used oil, a sulfur content limitation for on-spec. used oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.d** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revisions occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, B.5, C.3, and D.5.

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- 2.f** All used oil burned in this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 ppm maximum*
PCB's	less than 2 ppm
flash point	100°F, minimum;

and shall also not exceed the following mercury limitation nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter.

B. Operational Restrictions

1. The permittee shall burn only natural gas or on-spec used oil in this emissions unit.
2. The quality of on-spec used oil received for burning in this emissions unit shall have a sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.529 lb/mmBtu of actual heat input and the sulfur content limitation for on-spec used oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 14,883 MCF. The maximum rolling twelve month on-spec used oil usage

rate for this emissions unit shall not exceed 169,587 gallons.

4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural gas usage upon issuance of this permit.
5. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the permittee shall not exceed the used oil burned limitations specified in the following table:

Month	Maximum Allowable Used Oil Burned (B003) (gallons)
1	14,132
1 - 2	28,265
1 - 3	42,396
1 - 4	56,528
1 - 5	70,660
1 - 6	84,792
1 - 7	98,924
1 - 8	113,056
1 - 9	127,188
1 - 10	141,320
1 - 11	155,452
1 - 12	169,587

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual used oil burned limitation shall be based upon a rolling, 12-month summation of used oil burned, in gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of used oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be

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calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

- b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
 3. The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (MCF) burned in this emissions unit.
 - b. The total number of gallons of on-spec used oil burned in this emissions unit.
 - c. The amount of PE, NO_x, SO₂, and CO.
 - d. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the cumulative used oil amounts.
 - e. The total summation of the amount of natural gas fuel used per rolling twelve months.
 - f. Beginning after the first 12 calendar months of operation while burning used oil following the issuance of this permit, the number of gallons of used oil used per rolling twelve months.
 4. The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
 - c. the results of the chemical analyses demonstrating the used oil meets the standards in OAC 3745-279-11, including:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;

- iv. the lead content, in ppm;
 - v. total halogens, in ppm; and
 - vi. the flash point
- d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-63 (B); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 3 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (Northeast District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or on-spec used oil meeting the

requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and on-spec used oil usage limitations.

The permittee shall submit deviation (excursion) reports that identify all exceedances of the maximum allowable cumulative on-spec used oil limitation listed in term B.5 for the first 12 calendar months of operation while burning used oil.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Northeast District Office), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
7. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of on-spec used oil which is received for burning in this emissions unit. Also, if no on-spec is received during the quarter, a letter stating this shall be submitted. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil

received during the calendar month; and,

- c. The weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the used oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
0.334 lb/mmBtu, 4.02 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 46.72 lbs PE/10³ gallons emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gallons.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 46.72 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-1 (9/96) (for used oil combustion). Emission factor 64*A, where "A" is the percent ash in the fuel, average taken as 0.73.

The calculated annual PE emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance

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with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.17 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 1.0 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-3 (9/96) (for used oil combustion).

The calculated annual TOC emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.136 lb/mmBtu, 2.38 TPY NOx emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 19 lbs NOx/10³ gal emission factor into lbs NOx/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 19 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual NO_x emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 1.07 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 5 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual CO emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

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- e. Emission Limitation(s):
0.529 lb/mmBtu, 6.24 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 74 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 74 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion). Emission factor 147*S, where "S" is the percent sulfur in the fuel with a required minimum of 0.5.

The calculated annual SO₂ emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described

in section C.

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas and compliant on-spec used oil.

Greer

PTI A

Issued: 7/20/2006

Emissions Unit ID: **B004****PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)****A. 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>
B004 - Fire tube boiler rated 21 MMBTU (C4). North American Boiler AB-6121-21.0-E25-UV-FM. 1968. Plant 1. Burning natural gas and on spec. waste oil.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc
The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06	OAC rule 3745-17-10(B)(1)
	OAC rule 3745-18-06(D)
	OAC rule 3745-21-08(B)
	OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)

OAC rule 3745-31-05(C)

Applicable Emissions <u>Limitations/Control Measures</u>	3745-17-10(B)(1). See term A.I.2.f.
Particulate emissions (PE) shall not exceed 0.334 lb/mmBtu when burning on-spec used oil.	The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.	When burning natural gas the emissions unit shall not emit more than 0.02 lbs/mmBtu particulate matter.
Nitrogen oxides (NOx) emissions shall not exceed 0.136 lb/mmBtu.	When burning used oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.	See term A.2.d.
Sulfur dioxide (SO ₂) emissions shall not exceed 0.529 lb/mmBtu.	See term A.I.2.c.
Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.	See term A.I.2.e.
The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and	PE* shall not exceed 4.02 TPY on a rolling twelve month basis. NOx shall not exceed 2.38 TPY on a rolling twelve month basis. SO ₂ shall not exceed 6.24 TPY on a rolling twelve month basis. CO shall not exceed 1.07 TPY on a rolling twelve month basis. *for purposes of PSD and

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nonattainment review all PE is
particulate matter less than 10
microns in diameter (PM10).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or on-spec. used oil, a sulfur content limitation for on-spec. used oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.d** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revisions occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, B.5, C.3, and D.5.

- 2.f** All used oil burned in this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 ppm maximum*
PCB's	less than 2 ppm
flash point	100°F, minimum;

and shall also not exceed the following mercury limitation nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter.

B. Operational Restrictions

1. The permittee shall burn only natural gas or on-spec used oil in this emissions unit.
2. The quality of on-spec used oil received for burning in this emissions unit shall have a sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.529 lb/mmBtu of actual heat input and the sulfur content limitation for on-spec used oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 14,883 MCF. The maximum rolling twelve month on-spec used oil usage

rate for this emissions unit shall not exceed 169,587 gallons.

4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural gas usage upon issuance of this permit.
5. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the permittee shall not exceed the used oil burned limitations specified in the following table:

Month	Maximum Allowable Used Oil Burned (B004) (gallons)
1	14,132
1 - 2	28,265
1 - 3	42,396
1 - 4	56,528
1 - 5	70,660
1 - 6	84,792
1 - 7	98,924
1 - 8	113,056
1 - 9	127,188
1 - 10	141,320
1 - 11	155,452
1 - 12	169,587

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual used oil burned limitation shall be based upon a rolling, 12-month summation of used oil burned, in gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of used oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same

supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

- b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
 3. The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (MCF) burned in this emissions unit.
 - b. The total number of gallons of on-spec used oil burned in this emissions unit.
 - c. The amount of PE, NO_x, SO₂, and CO.
 - d. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the cumulative used oil amounts.
 - e. The total summation of the amount of natural gas fuel used per rolling twelve months.
 - f. Beginning after the first 12 calendar months of operation while burning used oil following the issuance of this permit, the number of gallons of used oil used per rolling twelve months.
 4. The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
 - c. the results of the chemical analyses demonstrating the used oil meets the standards in OAC 3745-279-11, including:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;
 - iv. the lead content, in ppm;

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- v. total halogens, in ppm; and
 - vi. the flash point
- d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-63 (B); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 3 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (Northeast District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or on-spec used oil meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and on-spec used oil usage limitations.

The permittee shall submit deviation (excursion) reports that identify all exceedances of the maximum allowable cumulative on-spec used oil limitation listed in term B.5 for the first 12 calendar months of operation while burning used oil.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Northeast District Office), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
7. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of on-spec used oil which is received for burning in this emissions unit. Also, if no on-spec is received during the quarter, a letter stating this shall be submitted. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and,

- c. The weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the used oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
 0.334 lb/mmBtu, 4.02 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 46.72 lbs PE/10³ gallons emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gallons.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 46.72 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-1 (9/96) (for used oil combustion). Emission factor 64*A, where "A" is the percent ash in the fuel, average taken as 0.73.

The calculated annual PE emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.17 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 1.0 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-3 (9/96) (for used oil combustion).

The calculated annual TOC emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.136 lb/mmBtu, 2.38 TPY NOx emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 19 lbs NOx/10³ gal emission factor into lbs NOx/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NOx/10⁶ scf of fuel burned from AP-42, "Compilation

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of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 19 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual NO_x emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
 0.082 lb/mmBtu, 1.07 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 5 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual CO emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

- e. Emission Limitation(s):
 0.529 lb/mmBtu, 6.24 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 74 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 74 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion). Emission factor 147*S, where "S" is the percent sulfur in the fuel with a required minimum of 0.5.

The calculated annual SO₂ emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described in section C.

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Facility ID: 0247101010

Emissions Unit ID: B004

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas and compliant on-spec used oil.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>
B005 - Fire tube boiler rated 25.1 MMBTU (C5). Burnham Boiler 3L-600-SP-G0-IC. 2004. Plant 1. Burning natural gas and on spec. waste oil.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc
The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06	OAC rule 3745-17-10(B)(1)
	OAC rule 3745-18-06(D)
	OAC rule 3745-21-08(B)
	OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)

OAC rule 3745-31-05(C)

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.334 lb/mmBtu when burning on-spec used oil.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NO_x) emissions shall not exceed 0.136 lb/mmBtu.

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.529 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and 3745-17-10(B)(1).

See term A.I.2.f.

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning natural gas the emissions unit shall not emit more than 0.02 lbs/mmBtu particulate matter.

When burning used oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.I.2.c.

See term A.I.2.e.

PE* shall not exceed 2.55 TPY on a rolling twelve month basis.
NO_x shall not exceed 3.26 TPY on a rolling twelve month basis.
SO₂ shall not exceed 3.75 TPY on a rolling twelve month basis.
CO shall not exceed 1.07 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10

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Greer

PTI A

Issued: 7/20/2006

Emissions Unit ID: **B005**

microns in diameter (PM10).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or on-spec. used oil, a sulfur content limitation for on-spec. used oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.d** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revisions occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, B.5, C.3, and D.5.

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- 2.f** All used oil burned in this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 ppm maximum*
PCB's	less than 2 ppm
flash point	100°F, minimum;

and shall also not exceed the following mercury limitation nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter.

B. Operational Restrictions

1. The permittee shall burn only natural gas or on-spec used oil in this emissions unit.
2. The quality of on-spec used oil received for burning in this emissions unit shall have a sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.529 lb/mmBtu of actual heat input and the sulfur content limitation for on-spec used oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 44,474 MCF. The maximum rolling twelve month on-spec used oil usage

rate for this emissions unit shall not exceed 101,541 gallons.

4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural gas usage upon issuance of this permit.
5. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the permittee shall not exceed the used oil burned limitations specified in the following table:

Month	Maximum Allowable Used Oil Burned (B005) (gallons)
1	8,462
1 - 2	16,924
1 - 3	25,386
1 - 4	33,848
1 - 5	42,310
1 - 6	50,772
1 - 7	59,234
1 - 8	67,696
1 - 9	76,158
1 - 10	84,620
1 - 11	93,082
1 - 12	101,541

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual used oil burned limitation shall be based upon a rolling, 12-month summation of used oil burned, in gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of used oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur

Emissions Unit ID: **B005**

dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

- b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
 3. The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (MCF) burned in this emissions unit.
 - b. The total number of gallons of on-spec used oil burned in this emissions unit.
 - c. The amount of PE, NO_x, SO₂, and CO.
 - d. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the cumulative used oil amounts.
 - e. The total summation of the amount of natural gas fuel used per rolling twelve months.
 - f. Beginning after the first 12 calendar months of operation while burning used oil following the issuance of this permit, the number of gallons of used oil used per rolling twelve months.
 4. The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
 - c. the results of the chemical analyses demonstrating the used oil meets the standards in OAC 3745-279-11, including:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;

- iii. the chromium content, in ppm;
 - iv. the lead content, in ppm;
 - v. total halogens, in ppm; and
 - vi. the flash point
- d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-63 (B); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 3 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (Northeast District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel

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burned in this emissions unit other than natural gas or on-spec used oil meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and on-spec used oil usage limitations.

The permittee shall submit deviation (excursion) reports that identify all exceedances of the maximum allowable cumulative on-spec used oil limitation listed in term B.5 for the first 12 calendar months of operation while burning used oil.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Northeast District Office), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
7. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of on-spec used oil which is received for burning in this emissions unit. Also, if no on-spec is received during the quarter, a letter stating this shall be submitted. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);

- b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and,
- c. The weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the used oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation(s):
0.334 lb/mmBtu, 2.55 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 46.72 lbs PE/10³ gallons emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gallons.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 46.72 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-1 (9/96) (for used oil combustion). Emission factor 64*A, where "A" is the percent ash in the fuel, average taken as 0.73.

The calculated annual PE emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual PE

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emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.30 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 1.0 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-3 (9/96) (for used oil combustion).

The calculated annual TOC emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.136 lb/mmBtu, 3.26 TPY NOx emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 19 lbs NOx/10³ gal emission factor into lbs NOx/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 19 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual NO_x emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 2.18 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 5 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual CO emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

- e. Emission Limitation(s):
0.529 lb/mmBtu, 3.75 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 74 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 74 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion). Emission factor 147*S, where "S" is the percent sulfur in the fuel with a required minimum of 0.5.

The calculated annual SO₂ emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
 ≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described in section C.

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas and compliant on-spec used oil.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>
B006 - Fire tube boiler rated 21 MMBTU (A3). Superior Boiler 8-5-2500. 1999. Plant 1A. Burning natural gas and No. 2 fuel oil.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc OAC rule 3745-17-10(B)(1)
The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06	OAC rule 3745-18-06(D)
	OAC rule 3745-21-08(B) OAC rule 3745-21-07(B) OAC rule 3745-23-06(B) OAC rule 3745-31-05(C)

Greer**PTI A****Issued: 7/20/2006**Emissions Unit ID: **B006**

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.014 lb/mmBtu.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu

Nitrogen oxides (NO_x) emissions shall not exceed 0.143 lb/mmBtu.

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu .

Sulfur dioxide (SO₂) emissions shall not exceed 0.507 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules
3745-31-05(C),
3745-21-07(B),
3745-21-08(B),
3745-23-06(B), and
3745-17-10(B)(1).

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning No.2 fuel oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.1.2.c.

See term A.1.2.e.

PE* shall not exceed 0.09 TPY on a rolling twelve month basis.
NO_x shall not exceed 0.95 TPY on a rolling twelve month basis.
SO₂ shall not exceed 2.02 TPY on a rolling twelve month basis.
CO shall not exceed 0.46 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10 microns in diameter (PM₁₀).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or No. 2 fuel oil, a sulfur content limitation for No. 2 fuel oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

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

- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, C.3, and D.5.

B. Operational Restrictions

1. The permittee shall burn only natural gas or No. 2 fuel oil in this emissions unit.
2. The quality of No. 2 fuel oil received for burning in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.507 lb/mmBtu of actual heat input and the sulfur content limitation for No. 2 fuel oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month No. 2 fuel oil usage rate for this emissions unit shall not exceed 56,778 gallons. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 7,442 MCF.
4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural and No. 2 fuel oil gas usage upon issuance of this permit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.
 - b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

3. The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (MCF) burned in this emissions unit.
 - b. The total number of gallons of No. 2 fuel oil burned in this emissions unit.
 - c. The amount of PE, NO_x, SO₂, and CO.
 - d. The total summation of the amount of natural gas fuel used per rolling twelve months.
 - e. The total summation of the number of gallons of No. 2 fuel oil used per rolling twelve months.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or No. 2 fuel oil meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.

5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and No. 2 fuel oil usage limitations.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of No. 2 fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and,
 - c. The weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the No. 2 fuel oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation(s):
0.014 lb/mmBtu, 0.09 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 2 lbs PE/10³ gal emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 2 lbs of PE/10³ gal of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual PE emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.06 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 0.556 lbs of TOC/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-3 (9/98) (for distillate fuel oil-fired).

The calculated annual TOC emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual TOC

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

- c. Emission Limitation(s):
0.143 lb/mmBtu, 0.95 TPY NO_x emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 20 lbs NO_x/10³ gal emission factor into lbs NO_x/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 20 lbs of NO_x/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual NO_x emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 0.46 TPY CO emissions

Emissions Unit ID: **B006**

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 5 lbs of CO/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual CO emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

- e. Emission Limitation(s):
0.507 lb/mmBtu, 2.02 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 71 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 71 lbs of SO₂/10³ gallons (142*0.5) of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table

1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual SO₂ emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):
Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
 ≤ 0.5 weight percent sulfur

Applicable Compliance Method:
Compliance shall be demonstrated by the record keeping requirement described in section C.

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas or No. 2 fuel oil.

Greer

PTI A

Issued: 7/20/2006

Emissions Unit ID: B007

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**A. 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>
B007 - Fire tube boiler rated 21 MMBTU (A4). Superior Boiler 8-5-2500. 1997. Plant 1A. Burning natural gas and No. 2 fuel oil.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc OAC rule 3745-17-10(B)(1)
The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06	OAC rule 3745-18-06(D)
	OAC rule 3745-21-08(B)
	OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)
	OAC rule 3745-31-05(C)

Green Circle Growers
PTI Application: 02-21070
Issue

Facility ID: 0247101010

Emissions Unit ID: B007

Applicable Emissions
 Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.014 lb/mmBtu.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NOx) emissions shall not exceed 0.143 lb/mmBtu .

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.507 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and 3745-17-10(B)(1).

The emission limitation

specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning No.2 fuel oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.1.2.c.

See term A.1.2.e.

PE* shall not exceed 0.09 TPY on a rolling twelve month basis. NOx shall not exceed 0.95 TPY on a rolling twelve month basis. SO₂ shall not exceed 2.02 TPY on a rolling twelve month basis. CO shall not exceed 0.46 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10 microns in diameter (PM10).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or No. 2 fuel oil, a sulfur content limitation for No. 2 fuel oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

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

- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, C.3, and D.5.

B. Operational Restrictions

1. The permittee shall burn only natural gas or No. 2 fuel oil in this emissions unit.
2. The quality of No. 2 fuel oil received for burning in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.507 lb/mmBtu of actual heat input and the sulfur content limitation for No. 2 fuel oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month No. 2 fuel oil usage rate for this emissions unit shall not exceed 56,778 gallons. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 7,442 MCF.
4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural and No. 2 fuel oil gas usage upon issuance of this permit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.
 - b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

3. The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (MCF) burned in this emissions unit.
 - b. The total number of gallons of No. 2 fuel oil burned in this emissions unit.
 - c. The amount of PE, NO_x, SO₂, and CO.
 - d. The total summation of the amount of natural gas fuel used per rolling twelve months.
 - e. The total summation of the number of gallons of No. 2 fuel oil used per rolling twelve months.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or No. 2 fuel oil meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and No. 2 fuel oil usage limitations.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of No. 2 fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and,
 - c. The weighted* average heat content (Btu/gallon) of the oil received during the

calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the No. 2 fuel oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
0.014 lb/mmBtu, 0.09 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 2 lbs PE/10³ gal emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 2 lbs of PE/10³ gal of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual PE emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.06 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 0.556 lbs of TOC/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-3 (9/98) (for distillate fuel oil-fired).

The calculated annual TOC emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.143 lb/mmBtu, 0.95 TPY NO_x emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 20 lbs NO_x/10³ gal emission factor into lbs NO_x/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

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For no. 2 fuel oil: 20 lbs of NO_x/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual NO_x emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 0.46 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 5 lbs of CO/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual CO emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

- e. Emission Limitation(s):
0.507 lb/mmBtu, 2.02 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 71 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 71 lbs of SO₂/10³ gallons (142*0.5) of fuel burned from AP-42,

"Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual SO₂ emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described in section C.

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas or No. 2 fuel oil.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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 - Fire tube boiler rated 21 MMBTU (D1). Superior Boiler 8-5-2500. 1996. Plant 2. Burning natural gas and on spec. waste oil.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc
The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06	OAC rule 3745-17-10(B)(1)
	OAC rule 3745-18-06(D)
	OAC rule 3745-21-08(B)
	OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)
	OAC rule 3745-31-05(C)

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.334 lb/mmBtu when burning on-spec used oil.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NOx) emissions shall not exceed 0.136 lb/mmBtu.

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.529 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and 3745-17-10(B)(1).

See term A.1.2.f.

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning natural gas the emissions unit shall not emit more than 0.02 lbs/mmBtu particulate matter.

When burning used oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.1.2.c.

See term A.1.2.e.

PE* shall not exceed 2.63 TPY on a rolling twelve month basis. NOx shall not exceed 1.81 TPY on a rolling twelve month basis. SO₂ shall not exceed 4.05 TPY on a rolling twelve month basis. CO shall not exceed 0.92 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10

microns in diameter (PM10).

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Greer

PTI A

Issued: 7/20/2006

Emissions Unit ID: **B008**

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or on-spec. used oil, a sulfur content limitation for on-spec. used oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

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

- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, B.5, C.3, and D.5.

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- 2.f** All used oil burned in this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 ppm maximum*
PCB's	less than 2 ppm
flash point	100°F, minimum;

and shall also not exceed the following mercury limitation nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter.

B. Operational Restrictions

1. The permittee shall burn only natural gas or on-spec used oil in this emissions unit.
2. The quality of on-spec used oil received for burning in this emissions unit shall have a sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.529 lb/mmBtu of actual heat input and the sulfur content limitation for on-spec used oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 14,883 MCF. The maximum rolling twelve month on-spec used oil usage

rate for this emissions unit shall not exceed 110,087 gallons.

4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural gas usage upon issuance of this permit.
5. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the permittee shall not exceed the used oil burned limitations specified in the following table:

Month	Maximum Allowable Used Oil Burned (B008) (gallons)
1	9,174
1 - 2	18,348
1 - 3	27,522
1 - 4	36,696
1 - 5	45,870
1 - 6	55,044
1 - 7	64,218
1 - 8	73,392
1 - 9	82,566
1 - 10	91,740
1 - 11	100,914
1 - 12	110,087

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual used oil burned limitation shall be based upon a rolling, 12-month summation of used oil burned, in gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of used oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be

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calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

- b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
 3. The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (MCF) burned in this emissions unit.
 - b. The total number of gallons of on-spec used oil burned in this emissions unit.
 - c. The amount of PE, NO_x, SO₂, and CO.
 - d. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the cumulative used oil amounts.
 - e. The total summation of the amount of natural gas fuel used per rolling twelve months.
 - f. Beginning after the first 12 calendar months of operation while burning used oil following the issuance of this permit, the number of gallons of used oil used per rolling twelve months.
 4. The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
 - c. the results of the chemical analyses demonstrating the used oil meets the standards in OAC 3745-279-11, including:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;

- iv. the lead content, in ppm;
 - v. total halogens, in ppm; and
 - vi. the flash point
- d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-63 (B); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 3 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (Northeast District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or on-spec used oil meeting the

requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and on-spec used oil usage limitations.

The permittee shall submit deviation (excursion) reports that identify all exceedances of the maximum allowable cumulative on-spec used oil limitation listed in term B.5 for the first 12 calendar months of operation while burning used oil.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Northeast District Office), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
7. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of on-spec used oil which is received for burning in this emissions unit. Also, if no on-spec is received during the quarter, a letter stating this shall be submitted. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil

received during the calendar month; and,

- c. The weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the used oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
0.334 lb/mmBtu, 2.63 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 46.72 lbs PE/10³ gallons emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gallons.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 46.72 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-1 (9/96) (for used oil combustion). Emission factor 64*A, where "A" is the percent ash in the fuel, average taken as 0.73.

The calculated annual PE emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance

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with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.14 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 1.0 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-3 (9/96) (for used oil combustion).

The calculated annual TOC emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.136 lb/mmBtu, 1.81 TPY NOx emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 19 lbs NOx/10³ gal emission factor into lbs NOx/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 19 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual NO_x emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 0.92 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 5 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual CO emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

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- e. Emission Limitation(s):
0.529 lb/mmBtu, 4.05 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 74 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 74 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion). Emission factor 147*S, where "S" is the percent sulfur in the fuel with a required minimum of 0.5.

The calculated annual SO₂ emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described

in section C.

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas and compliant on-spec used oil.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>
<p>B009 - Fire tube boiler rated 21 MMBTU (D2). Superior Boiler 8-5-2500. 1996. Plant 2. Burning natural gas and on spec. waste oil.</p> <p>The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06</p>	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc</p> <p>OAC rule 3745-17-10(B)(1)</p> <p>OAC rule 3745-18-06(D)</p> <p>OAC rule 3745-21-08(B)</p> <p>OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)</p>

OAC rule 3745-31-05(C)

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.334 lb/mmBtu when burning on-spec used oil.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NOx) emissions shall not exceed 0.136 lb/mmBtu.

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.529 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and

3745-17-10(B)(1).

See term A.I.2.f.

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning natural gas the emissions unit shall not emit more than 0.02 lbs/mmBtu particulate matter.

When burning used oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.I.2.c.

See term A.I.2.e.

PE* shall not exceed 2.63 TPY on a rolling twelve month basis.
NOx shall not exceed 1.81 TPY on a rolling twelve month basis.
SO₂ shall not exceed 4.05 TPY on a rolling twelve month basis.
CO shall not exceed 0.92 TPY on a rolling twelve month basis.

*for purposes of PSD and

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nonattainment review all PE is
particulate matter less than 10
microns in diameter (PM10).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or on-spec. used oil, a sulfur content limitation for on-spec. used oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

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

- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, B.5, C.3, and D.5.

- 2.f** All used oil burned in this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 ppm maximum*
PCB's	less than 2 ppm
flash point	100°F, minimum;

and shall also not exceed the following mercury limitation nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter.

B. Operational Restrictions

1. The permittee shall burn only natural gas or on-spec used oil in this emissions unit.
2. The quality of on-spec used oil received for burning in this emissions unit shall have a sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.529 lb/mmBtu of actual heat input and the sulfur content limitation for on-spec used oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 14,883 MCF. The maximum rolling twelve month on-spec used oil usage

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rate for this emissions unit shall not exceed 110,087 gallons.

4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural gas usage upon issuance of this permit.
5. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the permittee shall not exceed the used oil burned limitations specified in the following table:

Month	Maximum Allowable Used Oil Burned (B009) (gallons)
1	9,174
1 - 2	18,348
1 - 3	27,522
1 - 4	36,696
1 - 5	45,870
1 - 6	55,044
1 - 7	64,218
1 - 8	73,392
1 - 9	82,566
1 - 10	91,740
1 - 11	100,914
1 - 12	110,087

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual used oil burned limitation shall be based upon a rolling, 12-month summation of used oil burned, in gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of used oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same

supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

- b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
 3. The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (MCF) burned in this emissions unit.
 - b. The total number of gallons of on-spec used oil burned in this emissions unit.
 - c. The amount of PE, NO_x, SO₂, and CO.
 - d. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the cumulative used oil amounts.
 - e. The total summation of the amount of natural gas fuel used per rolling twelve months.
 - f. Beginning after the first 12 calendar months of operation while burning used oil following the issuance of this permit, the number of gallons of used oil used per rolling twelve months.
 4. The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
 - c. the results of the chemical analyses demonstrating the used oil meets the standards in OAC 3745-279-11, including:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;
 - iv. the lead content, in ppm;

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- v. total halogens, in ppm; and
 - vi. the flash point
- d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-63 (B); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 3 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (Northeast District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or on-spec used oil meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and on-spec used oil usage limitations.

The permittee shall submit deviation (excursion) reports that identify all exceedances of the maximum allowable cumulative on-spec used oil limitation listed in term B.5 for the first 12 calendar months of operation while burning used oil.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Northeast District Office), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
7. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of on-spec used oil which is received for burning in this emissions unit. Also, if no on-spec is received during the quarter, a letter stating this shall be submitted. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and,

- c. The weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the used oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
0.334 lb/mmBtu, 2.63 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 46.72 lbs PE/10³ gallons emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gallons.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 46.72 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-1 (9/96) (for used oil combustion). Emission factor 64*A, where "A" is the percent ash in the fuel, average taken as 0.73.

The calculated annual PE emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.14 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 1.0 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-3 (9/96) (for used oil combustion).

The calculated annual TOC emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.136 lb/mmBtu, 1.81 TPY NOx emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 19 lbs NOx/10³ gal emission factor into lbs NOx/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NOx/10⁶ scf of fuel burned from AP-42, "Compilation

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of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 19 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual NO_x emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 0.92 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 5 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual CO emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

- e. Emission Limitation(s):
0.529 lb/mmBtu, 4.05 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 74 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 74 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion). Emission factor 147*S, where "S" is the percent sulfur in the fuel with a required minimum of 0.5.

The calculated annual SO₂ emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described in section C.

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F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas and compliant on-spec used oil.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>
<p>B010 - Fire tube boiler rated 21 MMBTU (D3). Superior Boiler 8-5-2500. 1996. Plant 2. Burning natural gas and on spec. waste oil.</p> <p>The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06</p>	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc</p> <p>OAC rule 3745-17-10(B)(1)</p> <p>OAC rule 3745-18-06(D)</p> <p>OAC rule 3745-21-08(B)</p> <p>OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)</p>

OAC rule 3745-31-05(C)

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.334 lb/mmBtu when burning on-spec used oil.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NOx) emissions shall not exceed 0.136 lb/mmBtu.

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.529 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and 3745-17-10(B)(1).

See term A.I.2.f.

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning natural gas the emissions unit shall not emit more than 0.02 lbs/mmBtu particulate matter.

When burning used oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.I.2.c.

See term A.I.2.e.

PE* shall not exceed 2.63 TPY on a rolling twelve month basis.
NOx shall not exceed 1.81 TPY on a rolling twelve month basis.
SO₂ shall not exceed 4.05 TPY on a rolling twelve month basis.
CO shall not exceed 0.92 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10

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microns in diameter (PM10).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or on-spec. used oil, a sulfur content limitation for on-spec. used oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

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

- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, B.5, C.3, and D.5.

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- 2.f** All used oil burned in this emissions unit shall be "on-specification" (on-spec) oil and must meet the used oil fuel specifications contained in OAC 3745-279-11, which restricts the used oil to the following limitations:

<u>Contaminant/Property</u>	<u>Allowable Specifications</u>
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
lead	100 ppm, maximum
total halogens	4,000 ppm maximum*
PCB's	less than 2 ppm
flash point	100°F, minimum;

and shall also not exceed the following mercury limitation nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
mercury	1 ppm, maximum

* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil exceeding 1,000 ppm total halogens (but less than 4,000 ppm maximum) only if the permittee has demonstrated that the used oil does not contain any hazardous waste pursuant to OAC rule 3745-279-63.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter.

B. Operational Restrictions

1. The permittee shall burn only natural gas or on-spec used oil in this emissions unit.
2. The quality of on-spec used oil received for burning in this emissions unit shall have a sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.529 lb/mmBtu of actual heat input and the sulfur content limitation for on-spec used oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 14,883 MCF. The maximum rolling twelve month on-spec used oil usage

rate for this emissions unit shall not exceed 110,087 gallons.

4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural gas usage upon issuance of this permit.
5. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the permittee shall not exceed the used oil burned limitations specified in the following table:

Month	Maximum Allowable Used Oil Burned (B010) (gallons)
1	9,174
1 - 2	18,348
1 - 3	27,522
1 - 4	36,696
1 - 5	45,870
1 - 6	55,044
1 - 7	64,218
1 - 8	73,392
1 - 9	82,566
1 - 10	91,740
1 - 11	100,914
1 - 12	110,087

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual used oil burned limitation shall be based upon a rolling, 12-month summation of used oil burned, in gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of used oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be

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calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

- b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
 3. The permittee shall maintain monthly records of the following information:
 - a. The total volume of natural gas (MCF) burned in this emissions unit.
 - b. The total number of gallons of on-spec used oil burned in this emissions unit.
 - c. The amount of PE, NO_x, SO₂, and CO.
 - d. During the first 12 calendar months of operation while burning used oil following the issuance of this permit, the cumulative used oil amounts.
 - e. The total summation of the amount of natural gas fuel used per rolling twelve months.
 - f. Beginning after the first 12 calendar months of operation while burning used oil following the issuance of this permit, the number of gallons of used oil used per rolling twelve months.
 4. The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit, which shall contain the following information:
 - a. the date the used oil was received at the facility;
 - b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/re-finer, supplier, and/or marketer;
 - c. the results of the chemical analyses demonstrating the used oil meets the standards in OAC 3745-279-11, including:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;

- iv. the lead content, in ppm;
 - v. total halogens, in ppm; and
 - vi. the flash point
- d. the analysis demonstrating that the used oil has a total halogen content below 1,000 ppm, or below 4,000 ppm with the demonstration for the rebuttal of the presumption that the oil is hazardous waste or has been mixed with hazardous waste, as described in OAC rule 3745-279-63 (B); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and mercury limitation contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 3 years following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Hazardous Waste Management and/or the Division of Air Pollution Control (Northeast District Office) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses, through an independent laboratory.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or on-spec used oil meeting the

requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.

3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and on-spec used oil usage limitations.

The permittee shall submit deviation (excursion) reports that identify all exceedances of the maximum allowable cumulative on-spec used oil limitation listed in term B.5 for the first 12 calendar months of operation while burning used oil.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall notify the U.S. EPA and the Ohio EPA Division of Hazardous Waste Management and the Division of Air Pollution Control (Northeast District Office), in writing and within 30 days, of burning any used oil exceeding the limitations found in OAC rule 3745-279-11 and/or any incident or occurrence of non-compliance with any other applicable requirement of OAC Chapter 3745-279 and/or 40 CFR part 761; and shall also notify the Ohio EPA Division of Air Pollution Control, within the same amount of time, if any oil is/was burned which exceeds the mercury limitation of 1 ppm and/or is documented as having a heating value of less than 135,000 Btu/gallon.
7. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of on-spec used oil which is received for burning in this emissions unit. Also, if no on-spec is received during the quarter, a letter stating this shall be submitted. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil

received during the calendar month; and,

- c. The weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the used oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
0.334 lb/mmBtu, 2.63 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 46.72 lbs PE/10³ gallons emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gallons.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 46.72 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-1 (9/96) (for used oil combustion). Emission factor 64*A, where "A" is the percent ash in the fuel, average taken as 0.73.

The calculated annual PE emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance

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with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.14 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 1.0 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-3 (9/96) (for used oil combustion).

The calculated annual TOC emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.136 lb/mmBtu, 1.81 TPY NOx emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 19 lbs NOx/10³ gal emission factor into lbs NOx/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 19 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual NO_x emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 0.92 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 5 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion).

The calculated annual CO emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

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- e. Emission Limitation(s):
0.529 lb/mmBtu, 4.05 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 74 lbs SO₂/10³ gallons emission factor into lbs SO₂/mmBtu by dividing by 139,253 mmBtu/10³ gallons.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For on-spec used oil: 74 lbs of PE/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.11, Table 1.11-2 (9/96) (for used oil combustion). Emission factor 147*S, where "S" is the percent sulfur in the fuel with a required minimum of 0.5.

The calculated annual SO₂ emissions for natural gas and on-spec used oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described

in section C.

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas and compliant on-spec used oil.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>
<p>B011 - Fire tube boiler rated 21 MMBTU (B1). Superior Boiler 4-5-2506L-GP. 1993. Plant 6. Burning natural gas and No. 2 fuel oil.</p> <p>The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06</p>	<p>OAC rule 3745-31-05(A)(3)</p> <p>OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc OAC rule 3745-17-10(B)(1)</p> <p>OAC rule 3745-18-06(D)</p> <p>OAC rule 3745-21-08(B)</p> <p>OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)</p> <p>OAC rule 3745-31-05(C)</p>

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.014 lb/mmBtu.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NO_x) emissions shall not exceed 0.143 lb/mmBtu.

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.507 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and 3745-17-10(B)(1).

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning No.2 fuel oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.1.2.c.

See term A.1.2.e.

PE* shall not exceed 0.17 TPY on a rolling twelve month basis.
NO_x shall not exceed 1.90 TPY on a rolling twelve month basis.
SO₂ shall not exceed 4.04 TPY on a rolling twelve month basis.
CO shall not exceed 0.93 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10 microns in diameter (PM₁₀).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or No. 2 fuel oil, a sulfur content limitation for No. 2 fuel oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

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

- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, C.3, and D.5.

B. Operational Restrictions

1. The permittee shall burn only natural gas or No. 2 fuel oil in this emissions unit.
2. The quality of No. 2 fuel oil received for burning in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.507 lb/mmBtu of actual heat input and the sulfur content limitation for No. 2 fuel oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month No. 2 fuel oil usage rate for this emissions unit shall not exceed 113,556 gallons. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 14,883 MCF.
4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural and No. 2 fuel oil gas usage upon issuance of this permit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.
 - b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
3. The permittee shall maintain monthly records of the following information:

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Issue

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- a. The total volume of natural gas (MCF) burned in this emissions unit.
- b. The total number of gallons of No. 2 fuel oil burned in this emissions unit.
- c. The amount of PE, NO_x, SO₂, and CO.
- d. The total summation of the amount of natural gas fuel used per rolling twelve months.
- e. The total summation of the number of gallons of No. 2 fuel oil used per rolling twelve months.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or No. 2 fuel oil meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and No. 2 fuel oil usage limitations.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of No. 2 fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and,
 - c. The weighted* average heat content (Btu/gallon) of the oil received during the

calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the No. 2 fuel oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
0.014 lb/mmBtu, 0.17 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 2 lbs PE/10³ gal emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 2 lbs of PE/10³ gal of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual PE emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):

0.011 lb/mmBtu, 0.12 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 0.556 lbs of TOC/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-3 (9/98) (for distillate fuel oil-fired).

The calculated annual TOC emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.143 lb/mmBtu, 0.95 TPY NO_x emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 20 lbs NO_x/10³ gal emission factor into lbs NO_x/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 20 lbs of NO_x/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual NO_x emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 0.93 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 5 lbs of CO/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual CO emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

- e. **Emission Limitation(s):**
0.507 lb/mmBtu, 4.04 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 71 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 71 lbs of SO₂/10³ gallons (142*0.5) of fuel burned from AP-42,

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"Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual SO₂ emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described in section C.

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas or No. 2 fuel oil.

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PTI A

Issued: 7/20/2006

Emissions Unit ID: B012

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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 - Fire tube boiler rated 21 MMBTU (B2). Superior Boiler 4-5-2506L-GP. 1993. Plant 6. Burning natural gas and No. 2 fuel oil.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc OAC rule 3745-17-10(B)(1)
The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06	OAC rule 3745-18-06(D)
	OAC rule 3745-21-08(B) OAC rule 3745-21-07(B) OAC rule 3745-23-06(B) OAC rule 3745-31-05(C)

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.014 lb/mmBtu.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NO_x) emissions shall not exceed 0.143 lb/mmBtu.

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.507 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules
3745-31-05(C),
3745-21-07(B),
3745-21-08(B),
3745-23-06(B), and
3745-17-10(B)(1).

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning No.2 fuel oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.1.2.c.

See term A.1.2.e.

PE* shall not exceed 0.17 TPY on a rolling twelve month basis.
NO_x shall not exceed 1.90 TPY on a rolling twelve month basis.
SO₂ shall not exceed 4.04 TPY on a rolling twelve month basis.
CO shall not exceed 0.93 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10 microns in diameter (PM₁₀).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or No. 2 fuel oil, a sulfur content limitation for No. 2 fuel oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

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

- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, C.3, and D.5.

B. Operational Restrictions

1. The permittee shall burn only natural gas or No. 2 fuel oil in this emissions unit.
2. The quality of No. 2 fuel oil received for burning in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.507 lb/mmBtu of actual heat input and the sulfur content limitation for No. 2 fuel oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month No. 2 fuel oil usage rate for this emissions unit shall not exceed 113,556 gallons. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 14,883 MCF.
4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural and No. 2 fuel oil gas usage upon issuance of this permit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.
 - b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
3. The permittee shall maintain monthly records of the following information:

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- a. The total volume of natural gas (MCF) burned in this emissions unit.
- b. The total number of gallons of No. 2 fuel oil burned in this emissions unit.
- c. The amount of PE, NO_x, SO₂, and CO.
- d. The total summation of the amount of natural gas fuel used per rolling twelve months.
- e. The total summation of the number of gallons of No. 2 fuel oil used per rolling twelve months.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or No. 2 fuel oil meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and No. 2 fuel oil usage limitations.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of No. 2 fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and,
 - c. The weighted* average heat content (Btu/gallon) of the oil received during the calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the No. 2 fuel oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
0.014 lb/mmBtu, 0.17 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 2 lbs PE/10³ gal emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 2 lbs of PE/10³ gal of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual PE emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.12 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 0.556 lbs of TOC/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-3 (9/98) (for distillate fuel oil-fired).

The calculated annual TOC emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.143 lb/mmBtu, 0.95 TPY NO_x emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 20 lbs NO_x/10³ gal emission factor into lbs NO_x/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 20 lbs of NO_x/10³ gallons of fuel burned from AP-42,

"Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual NOx emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual NOx emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 0.93 TPY CO emissions

Emissions Unit ID: **B012**

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 5 lbs of CO/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual CO emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

- e. **Emission Limitation(s):**
 0.507 lb/mmBtu, 4.04 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 71 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 71 lbs of SO₂/10³ gallons (142*0.5) of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table

1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual SO₂ emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described in section C.

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas or No. 2 fuel oil.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>
B013 - Fire tube boiler rated 21 MMBTU (B3). Superior Boiler 8-5-2500. 2001. Plant 6. Burning natural gas and No. 2 fuel oil.	OAC rule 3745-31-05(A)(3) OAC rule 3745-17-07(A)(1) 40 CFR Part 60 Subpart Dc OAC rule 3745-17-10(B)(1)
The terms and conditions in this permit supercede those identified in PTI #02-21481 issued 3/2/06	OAC rule 3745-18-06(D)
	OAC rule 3745-21-08(B)
	OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)
	OAC rule 3745-31-05(C)

Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.014 lb/mmBtu.

Total Organic compound (TOC) emissions shall not exceed 0.011 lb/mmBtu.

Nitrogen oxides (NOx) emissions shall not exceed 0.143 lb/mmBtu.

Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.507 lb/mmBtu.

Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-21-07(B), 3745-21-08(B), 3745-23-06(B), and 3745-17-10(B)(1).

The emission limitation

specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

When burning No.2 fuel oil, the emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.d.

See term A.1.2.c.

See term A.1.2.e.

PE* shall not exceed 0.17 TPY on a rolling twelve month basis. NOx shall not exceed 1.90 TPY on a rolling twelve month basis. SO₂ shall not exceed 4.04 TPY on a rolling twelve month basis. CO shall not exceed 0.93 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10 microns in diameter (PM10).

2. Additional Terms and Conditions

- 2.a** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas or No. 2 fuel oil, a sulfur content limitation for No. 2 fuel oil, and the emission limitations listed in term A.1. above.
- 2.b** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.d** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revisions occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.e** In accordance with the provisions of both OAC rule 3745-31-05(C), the following special terms and conditions of this permit to install are federally enforceable: B.2., B.3, C.3, and D.5.

B. Operational Restrictions

1. The permittee shall burn only natural gas or No. 2 fuel oil in this emissions unit.
2. The quality of No. 2 fuel oil received for burning in this emissions unit shall have a combination of sulfur content and heat content sufficient to comply with the allowable sulfur dioxide emission limitation of 0.507 lb/mmBtu of actual heat input and the sulfur content limitation for No. 2 fuel oil of less than or equal to 0.5 weight per cent sulfur.
3. The maximum rolling twelve month No. 2 fuel oil usage rate for this emissions unit shall not exceed 113,556 gallons. The maximum rolling twelve month natural gas usage rate for this emissions unit shall not exceed 14,883 MCF.
4. This emissions unit has been in operation for more than twelve months and, as such, the permittee has existing records to generate the rolling twelve month summation of the natural and No. 2 fuel oil gas usage upon issuance of this permit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the No. 2 fuel oil burned in this emissions unit in accordance with the following:
 - a. For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)]. A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.
 - b. The permittee shall require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.
2. The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.
3. The permittee shall maintain monthly records of the following information:

- a. The total volume of natural gas (MCF) burned in this emissions unit.
- b. The total number of gallons of No. 2 fuel oil burned in this emissions unit.
- c. The amount of PE, NO_x, SO₂, and CO.
- d. The total summation of the amount of natural gas fuel used per rolling twelve months.
- e. The total summation of the number of gallons of No. 2 fuel oil used per rolling twelve months.

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date); and,
 - d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to the appropriate local air agency or District Office and to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than natural gas or No. 2 fuel oil meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall notify the Director (Northeast District Office) in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation and/or sulfur content limitation based upon the record keeping requirements from term C.1.
4. The notifications identified in terms D.2 and D.3 shall include a copy of such record and shall be sent to the Director (Northeast District Office) within 30 days after the deviation occurs.
5. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling twelve month natural gas and No. 2 fuel oil usage limitations.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

6. The permittee shall submit, on a quarterly basis, copies of the permittee's or oil supplier's analyses for each shipment of No. 2 fuel oil which is received for burning in this emissions unit. The permittee's or oil supplier's analysis shall document the sulfur content (percent) and heat content (Btu/gallon) for each shipment of oil. The following information shall also be included with the copies of the permittee's or oil supplier's analyses:
 - a. The total quantity of oil received in each shipment (gallons);
 - b. The weighted* average sulfur dioxide emission rate (pounds/mmBtu) for the oil received during the calendar month; and,
 - c. The weighted* average heat content (Btu/gallon) of the oil received during the

calendar month.

*In proportion to the quantity of oil received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the No. 2 fuel oil shipments received during the previous calendar quarters.

E. Testing Requirements

1. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
0.014 lb/mmBtu, 0.17 TPY PE

Applicable Compliance Method: Compliance with the lb/mmBtu emission limitation may be determined by converting the 2 lbs PE/10³ gal emission factor into lbs PE/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 7.6 lbs of PE/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 2 lbs of PE/10³ gal of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual PE emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual PE emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

- b. Emission Limitation(s):
0.011 lb/mmBtu, 0.12 TPY TOC emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 11 lbs TOC/10⁶ scf emission factor into lb TOC/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 11 lbs of TOC/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 0.556 lbs of TOC/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-3 (9/98) (for distillate fuel oil-fired).

The calculated annual TOC emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual TOC emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25.

- c. Emission Limitation(s):
0.143 lb/mmBtu, 0.95 TPY NO_x emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 20 lbs NO_x/10³ gal emission factor into lbs NO_x/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 100 lbs of NO_x/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

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For no. 2 fuel oil: 20 lbs of NO_x/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual NO_x emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual NO_x emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

- d. Emission Limitation(s):
0.082 lb/mmBtu, 0.93 TPY CO emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs CO/10⁶ scf emission factor into lb CO/mmBtu by dividing by 1,020 Btu/scf.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 84 lbs of CO/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-1 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 5 lbs of CO/10³ gallons of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual CO emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual CO emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

- e. Emission Limitation(s):
0.507 lb/mmBtu, 4.04 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the 71 lbs SO₂/10³ gal emission factor into lbs SO₂/mmBtu by dividing by 140 mmBtu/10³ gal.

Compliance with this combined emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factors:

For natural gas: 0.6 lbs of SO₂/10⁶ scf of fuel burned from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.4, Table 1.4-2 (7/98) (for industrial boilers of less than 100 mmBtu/hr heat input capacity).

For no. 2 fuel oil: 71 lbs of SO₂/10³ gallons (142*0.5) of fuel burned from AP-42,

"Compilation of Air Pollutant Emission Factors," fifth edition, section 1.3, Table 1.3-1 (9/98) (for distillate fuel oil-fired).

The calculated annual SO₂ emissions for natural gas and No. 2 fuel oil firing of these boilers should be added to determine compliance with the annual SO₂ emissions limitation. If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

- f. Emission Limitation(s):
10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

- g. Sulfur Content Limitation(s):
≤ 0.5 weight percent sulfur

Applicable Compliance Method:

Compliance shall be demonstrated by the record keeping requirement described in section C.

F. Miscellaneous Requirements

1. This unit is permitted to burn natural gas or No. 2 fuel oil.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. 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>	
B014 - Wood fired boiler rated at 70 MMBTU/hr CP1. Plant CP. Burning wood. Installed 2006. Controlled with a multi-cyclone and an electrostatic precipitator (ESP) with 2 field plates.		OAC rule 3745-21-08(B)
		OAC rule 3745-21-07(B) OAC rule 3745-23-06(B)
		40 CFR Part 60 Subpart Dc
		OAC rule 3745-31-05(C)
		OAC rule 3745-17-10(C)(1) OAC rule 3745-17-07(A)(1)

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Applicable Emissions
Limitations/Control Measures

Particulate emissions (PE) shall not exceed 0.1 lb/mmBtu.

Total Organic compound (TOC) emissions shall not exceed 0.039 lb/mmBtu.

Nitrogen oxides (NOx) emissions shall not exceed 0.22 lb/mmBtu .

Carbon monoxide (CO) emissions shall not exceed 0.6 lb/mmBtu.

Sulfur dioxide (SO₂) emissions shall not exceed 0.025 lb/mmBtu.

Hydrogen Chloride (HCL) emissions shall not exceed 0.019lb/mmBtu.

HCL shall not exceed 2.77 TPY on a rolling twelve month basis.

The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

See term A.2.c

See term A.2.d

See term A.2.e to A.2.f

PE* shall not exceed 14.6 TPY on a rolling twelve month basis.
NOx shall not exceed 32.0 TPY on a rolling twelve month basis.
SO₂ shall not exceed 3.64 TPY on a rolling twelve month basis.
CO shall not exceed 87.4 TPY on a rolling twelve month basis.

*for purposes of PSD and nonattainment review all PE is particulate matter less than 10 microns in diameter (PM10).

2. Additional Terms and Conditions

- 2.a** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency (U.S. EPA), 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency (Ohio EPA).
- 2.b** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the limited usage of wood waste, emissions limitations and the use of a multi-cyclone and ESP.
- 2.c** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

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

- 2.d** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3).

On February 15, 2005, OAC rule 3745-23-06 was rescinded and therefore no longer a part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-23-06, the requirement to satisfy "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.e** Visible particulate emissions from any stack shall not exceed 20% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity. (authority for rule 40 CFR Part 60.43c(c))

- 2.f** The particulate mater and opacity standards under this section apply at all times, except during periods of startup, shutdown or malfunctions. (authority for rule 40 CFR Part 60.43c(d))

B. Operational Restrictions

1. The maximum rolling twelve month wood waste usage rate for this emissions unit shall not exceed 64,726,667 lbs.

During the first 12 calendar months of operation while burning wood waste, following the issuance of this permit, the permittee shall not exceed the wood waste burned limitations specified in the following table:

Month	Maximum Allowable Wood Waste (B014) (lbs)
1	5,393,888
1 - 2	10,787,776
1 - 3	16,181,664
1 - 4	21,575,552
1 - 5	26,969,440
1 - 6	32,363,328
1 - 7	37,757,216
1 - 8	43,151,104
1 - 9	48,544,992
1 - 10	53,938,880
1 - 11	59,332,768
1 - 12	64,726,667

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual wood waste burned limitation shall be based upon a rolling, 12-month summation of wood waste burned, in pounds.

2. The permittee shall only burn tree trimmings and chipped trees from area land clearing operations. The permittee shall not burn wood or wood waste derived from any operation which coats, treats, or otherwise contaminates the wood or wood waste.
3. The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90% of the total combined power input, as a 3-hour average, during the most recent emission tests that demonstrated the emissions unit was in compliance with the

particulate emission limitation.

The permittee shall operate the ESP during any operation of this emissions unit, except the ESP may not be operated during periods of start-up until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP.

The operation of the control equipment outside of the restrictions established above may or may not indicate a mass emission violation. If required by the Ohio EPA, compliance with the mass emission limitations shall be determined by performing concurrent mass emission tests and parameter readings, using US EPA-approved methods and procedures. The results of any required emission tests and parameter readings shall be used in determining whether or not the operation of the control equipment outside of the restrictions specified above is indicative of a possible violation of the mass emission limitations.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall continuously monitor and record the hourly steam flow rate from emissions unit B014. Copies of all steam flow rate charts shall be maintained for a period of five years, and shall be made available to the Ohio EPA, Northeast District Office upon verbal or written request.
2. The owner or operator of the facility shall install, calibrate, maintain and operate a Continuous Opacity Monitor (COM) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. (authority for term 40 CFR Part 60.47c(a))
3. All COMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specifications 1 (appendix B). The span value of the opacity COMS shall be between 60 and 80 percent. (authority for term 40 CFR Part 60.47(b))
4. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-

level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Compound: Hydrogen Chloride

TLV (mg/m³): 5

Maximum Hourly Emission Rate (lbs/hr): 1.33

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 2.037

MAGLC (ug/m³): 130.60

5. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above

changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

6. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
7. The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:
 - a. the secondary voltage, in kilovolts, and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;
 - b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kilovolts) by the secondary current (in amps) for each TR set); and
 - c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).
8. The permittee shall monitor and record the following information on a daily basis:
 - a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90% of the total combined power input, as a 3-hour average, during the most recent emission tests that demonstrated the emissions unit was in compliance with the particulate emission limitation;

- b. the duration of any downtime for the ESP monitoring equipment for secondary voltage and current specified above, the ESP sections that are out of service, and the duration of the downtime for each section, when the associated emissions unit was in operation;
 - c. the permittee shall maintain daily records of the quantity of wood waste burned in this emissions unit.
 9. The permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the emissions unit exhaust gases entering the ESP as follows:
 - a. during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves a temperature of 250 degrees Fahrenheit; and
 - b. during all periods of shutdown until the inlet temperature to the ESP drops below 250 degrees Fahrenheit.

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

D. Reporting Requirements

1. Pursuant to the 40 CFR 60 Subpart Dc, the permittee is required to report the following information at the appropriate times (if the information has not already been reported):
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. actual start-up date (within 15 days after such date);
 - d. date of performance testing (if required, at least 30 days prior to testing); and
 - e. excess emission reports for any excess emissions from the affected facility which occur during the reporting periods (within 30 days after the excess emission occurs)

Reports are to be sent to the appropriate local air agency or District Office and to:

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Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P.O. Box 163669
Columbus, Ohio 43216-3669

2. The permittee shall notify the Director (Northeast District Office) in writing of any fuel burned in this emissions unit other than wood waste meeting the requirements of this permit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit deviation (excursion) reports that identify the following:
 - a. all exceedances of the rolling twelve month wood waste usage limitations;
 - b. all periods of time during start-up and shutdown of the emissions unit when the ESP was not in operation and the temperature of the emissions unit exhaust gases exceeded 250 degrees Fahrenheit; and
 - c. all 3-hour blocks of time during which the average total combined power input to all fields of the ESP does not comply with the operational restriction specified in Section B of this permit.

These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under Section A.

E. Testing Requirements

1. The facility is subject to the particulate matter and opacity standards under 40 CFR Part 60.43c and therefore shall conduct an initial performance test as required under 40 CFR Part 60.8 and shall conduct subsequent performance tests as requested by the Director of the Ohio EPA to determine compliance with the standards using approved test methods as described in 40 CFR Part 60.45c. (authority for term 40 CFR Part 60.45c(a))

Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Director of the Ohio EPA, the owner or operator of such facility shall conduct performance test(s) and furnish the Director of the Ohio EPA a written report of the results of such performance test(s).

Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Director of the Ohio EPA (1) specifies or approves, in specific cases, the use of a reference

method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Director of the Ohio EPA's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Director of the Ohio EPA's authority to require testing under section 114 of the Act.

Performance tests shall be conducted under such conditions as the Director of the Ohio EPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Director of the Ohio EPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Director of the Ohio EPA at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Director of the Ohio EPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Director of the Ohio EPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Director of the Ohio EPA by mutual agreement.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

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2. Safe sampling platform(s).
3. Safe access to sampling platform(s).
4. Utilities for sampling and testing equipment.

Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Director of the Ohio EPA's approval, be determined using the arithmetic mean of the results of the two other runs. (authority for term 40 CFR Part 60.8)

2. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation(s):
0.1 lb/mmBtu, 14.6 TPY PE

Applicable Compliance Method:

Compliance with this emission limitation shall be demonstrated through the emission testing requirements specified in Section E.1.

- b. Emission Limitation(s):
0.039 lb/mmBtu, 0.12 TPY TOC emissions

Applicable Compliance Method:

Compliance with this emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factor:

0.039 lbs of TOC/mmBtu from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.6, Table 1.6-3 (9/03) (for Wood Residue Combustion In Boilers).

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

- c. Emission Limitation(s):
0.22 lb/mmBtu, 32.0 TPY NO_x emissions

Applicable Compliance Method:

Compliance with this emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factor:

0.22 lbs NO_x/mmBtu from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.6, Table 1.6-2 (9/03) (for Wood Residue Combustion In Boilers).

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

- d. Emission Limitation(s):
0.6 lb/mmBtu, 87.4 TPY CO emissions

Applicable Compliance Method:

Compliance with this emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factor:

0.6 lbs CO/mmBtu from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.6, Table 1.6-2 (9/03) (for Wood Residue Combustion In Boilers).

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

- e. Emission Limitation(s):
0.025 lb/mmBtu, 3.64 TPY SO₂ emissions

Applicable Compliance Method:

Compliance with this emission limitation shall be determined through the record

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keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factor:

0.025 lbs SO₂/mmBtu from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.6, Table 1.6-2 (9/03) (for Wood Residue Combustion In Boilers).

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

- f. Emission Limitation(s):
0.019 lb/mmBtu, 2.77 TPY HCL emissions

Applicable Compliance Method:

Compliance with this emission limitation shall be determined through the record keeping specified in section C. of these terms and conditions during a calendar month along with the following emission factor:

0.019 lbs HCL/mmBtu from AP-42, "Compilation of Air Pollutant Emission Factors," fifth edition, section 1.6, Table 1.6-3 (9/03) (for Wood Residue Combustion In Boilers).

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 26.

- g. Emission Limitation(s):
20% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

F. Miscellaneous Requirements

1. This unit is permitted to burn wood waste.

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