Facility ID: 1431070971 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1431070971 Emissions Unit ID: B004 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

   (a) None.

2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

   (a) None.

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

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
B004-12.5 mmBtu/hr natural gas and No. 2 fuel oil boiler	OAC rule 3745-31-05(A)(3) (PTI 14-2492)	Sulfur Dioxide (SO2) emissions shall not 0.5 lb/mmBtu. Carbon Monoxide (CO) emissions shall not exceed 0.53 pound per hour. Nitrogen Oxide (NOx) emissions shall not exceed 2.10 pounds per hour. Organic Compound (OC) emissions shall not exceed 0.006 pound per hour. See sections B.1 and B.2. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-10(B)(1) and 40 CFR 60 Subpart Dc.
	40 CFR Part 60 Subpart Dc	Sulfur Dioxide (SO2) emissions shall not exceed 0.50 lb/mmBtu. See term A.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-10(B)(1)	Particulate Emissions (PE) shall not exceed 0.020 lb/mmBtu actual heat input.
	OAC rule 3745-21-08(B)	See term A.2.c.

2. **Additional Terms and Conditions**

   (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 section A.1 above.
   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). The requirements of 40 CFR Part 60 are also federally enforceable.
   The permittee shall satisfy 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 (BAT) requirements established pursuant to OAC rule 3745-31-05(A)(3) in this permit to install. The design of

the emissions unit and the technology associated with the current operating practices satisfy the BAT requirements.

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. On June 24, 2003, the rule revision was submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP); however, until the U.S. EPA approves the revision 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.

B. **Operational Restrictions**

1. The permittee shall burn only natural gas and/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 0.5 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.

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

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

   a. Alternative 1:

      For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in 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. Alternative 2:

      The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emissions unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit. A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing." The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lb/mmBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F)].
      c. The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate ASTM methods (such as, ASTM methods D240 and D4294), or equivalent methods as approved by the Director.

2. The 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 (mmft3) burned in this emissions unit.

   b. The total number of gallons of No. 2 fuel oil used in this boiler for each month.

D. **Reporting Requirements**

1. Pursuant to the NSPS, 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:

   Hamilton County Department of Environmental Services
   250 William Howard Taft Road
   Cincinnati, Ohio 45219

2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any fuel burned in this emissions unit other than natural gas or No. 2 fuel oil.

3. The permittee shall notify the Hamilton County Department of Environmental Services 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 section C.1 above.

4. The notifications identified in sections D.2 and D.3 shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 45 days after the deviation occurs.

E. **Testing Requirements**

1. Emission Limitation:

Carbon Monoxide (CO) emissions shall not exceed 0.53 pound per hour.

Applicable Compliance Method:
The CO emission limitation was calculated using the AP42 emission factor for No. 2 fuel oil of 5 lbs/1000 gallons multiplied by the maximum hourly oil usage rate of 105 gallons/hr which equals 0.53 pound of CO/hr.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emissions limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.
Emission Limitation:
Nitrogen Oxide (NOx) emissions shall not exceed 2.10 pounds per hour.

Applicable Compliance Method:
The NOx emission limitation was calculated using the AP42 emission factor for No. 2 fuel oil of 20 lbs/1000 gallons multiplied by the maximum hourly oil usage rate of 105 gallons/hr which equals 2.10 pounds of NOx/hr.

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

Emission Limitation:
Organic Compound (OC) emissions shall not exceed 0.006 pound per hour.

Applicable Compliance Method:
The OC emission limitation was calculated using the manufacturer supplied emission factor for No. 2 fuel oil of 0.0571 lb/1000 gallons multiplied by the maximum hourly oil usage rate of 105 gallons/hr which equals 0.006 pound of OC/hr.

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

Emission Limitation:

Particulate Emissions (PE) shall not exceed 0.020 lb/mmBtu actual heat input.

Applicable Compliance Method:

Compliance with the lb/mmBtu emission limitation may be determined by converting the AP42 emission factor of 2.0 lbs of PE/1000 gallons into lbs of PE/mmBtu by dividing by 140 mmBtu/1000 gallons.

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.

2. Emission Limitation:
Visible particulate emissions from any stack associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

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

3. Sulfur Content Limitation:
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 0.50 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.

Applicable Compliance Method:
Compliance shall be demonstrated by the record keeping requirement outlined in section C.1.

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. **Miscellaneous Requirements**

1. None