

Facility ID: 1409120656 Issuance type: Title V Final Permit

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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 III" and before "I. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

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## Part II - Specific Facility Terms and Conditions

### a State and Federally Enforceable Section

1. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.
2. All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR Part 61 and OAC Chapter 3745-20.
3. The permittee shall comply with all applicable provisions specified in 40 CFR Part 82, Subparts B and F as related to the operations at this facility.
4. Nitrogen Oxides (NOx) Budget Trading Program
  - OAC Chapter 3745-14
  - a. Office of Regulatory Information System Facility Code - 7158
  - b. The following regulated electrical generating units are subject to the applicable requirements specified in OAC Chapter 3745-14 and the annual NOx allowance allocations listed below:
    - . Annual Allowance for Annual Allowance for
    - . Calendar Years Calendar Years
    - Emissions Unit 2004 and 2005 2006 and 2007
    - B001 - GT1 30 29
    - B002 - GT2 30 29
    - B003 - GT3 39 38
    - B004 - GT4 37 36
    - B005 - GT5 40 39
    - B006 - GT6 39 38
  - c. The emissions units identified in Section A.4.b above are NOx budget units under OAC rule 3745-14-01(C)(1).  
[OAC rule 3745-14-01(C)(1)(a)(i)]
  - d. The NOx authorized account representative shall submit a complete NOx budget permit application in accordance with the deadlines specified in paragraphs (B)(2) and (B)(3) of OAC rule 3745-14-03. The NOx authorized account representative shall also submit, in a timely manner, any supplemental information that the Director determines is necessary in order to review a NOx budget permit application and issue or deny a NOx budget permit.  
[OAC rules 3745-14-01(E)(1)(a)(i), 3745-14-01(E)(1)(a)(ii), and 3745-14-03(B)(1)]
  - e. Beginning May 31, 2004, the owners and operators of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under paragraph (E) of OAC rule 3745-14-06, as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with OAC rule 3745-14-08, plus any amount necessary to account for actual utilization under paragraph (C)(5) of OAC rule 3745-14-05 for the control period.  
[OAC rules 3745-14-01(E)(3)(a) and 3745-14-01(E)(3)(c)]
  - f. NOx allowances shall be held in, deducted from, or transferred among NOx allowance tracking system accounts in accordance with OAC rules 3745-14-05, 3745-14-06, 3745-14-07, and 3745-14-09.  
[OAC rule 3745-14-01(E)(3)(d)]
  - g. A NOx allowance shall not be deducted, in order to comply with the requirement under paragraph (E)(3)(a)

- of OAC rule 3745-14-01, for a control period in a year prior to the year for which the NOx allowance was allocated.  
[OAC rule 3745-14-01(E)(3)(e)]
- h. Each ton of NOx emitted in excess of the NOx budget emission limitation, as defined in OAC rule 3745-14-01(B)(2)(yy), shall constitute a separate violation of OAC Chapter 3745-14, the Clean Air Act, and applicable Ohio law. The owners and operators of a NOx budget unit that has excess emissions in any control period shall surrender the NOx allowances required for deduction under paragraph (E)(4)(a) of OAC rule 3745-14-06 and pay any fine, penalty, or assessment or comply with any other remedy imposed under paragraph (E)(4)(c) of OAC rule 3745-14-06.  
[OAC rules 3745-14-01(E)(3)(b), 3745-14-01(E)(4)(a) and 3745-14-01(E)(4)(b)]
- i. When recorded by the Administrator pursuant to OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from a NOx budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NOx budget permit of the NOx budget unit by operation of law without any further review.  
[OAC rule 3745-14-01(E)(3)(h)]
- j. Except as provided below, the Director shall revise the NOx budget permit, as necessary, in accordance with OAC rule 3745-77-08.
- Each NOx budget permit is deemed to incorporate automatically the definitions of terms under paragraph (B) of OAC rule 3745-14-01 and, when recorded by the Administrator, in accordance with OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from the compliance accounts of the NOx budget units covered by the permit or the overdraft account of the NOx budget source covered by the permit.  
[OAC rules 3745-14-03(D)(2) and 3745-14-03(E)(1)]
- k. The owner or operator of a NOx budget unit shall comply with the prohibitions under OAC rule 3745-14-08(A)(5).  
[OAC rule 3745-14-08(A)(5)]
- l. The owners and operators of the NOx budget unit shall keep on site at the source each of the following documents for a period of five years from the date the document is created: (This period may be extended for cause, at any time prior to the end of five years, in writing by the Director or Administrator.)
- i. the account certificate of representation for the NOx authorized account representative for the NOx budget unit and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (D) of OAC rule 3745-14-02, provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate or representation changing the NOx authorized account representative;
  - ii. all emission monitoring information, in accordance with OAC rule 3745-14-08;
  - iii. copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx budget trading program; and
  - iv. copies of all documents used to complete a NOx budget permit application and any other submission under the NOx budget trading program or to demonstrate compliance with the requirements of the NOx budget trading program.  
[OAC rule 3745-14-01(E)(5)(a)(i) through (iv)]
- m. The permittee shall operate and maintain equipment to continuously estimate and record nitrogen oxides emissions from these emissions units in units of the applicable standard(s). Such continuous estimating and recording equipment shall comply with the requirements specified in 40 CFR Part 75, Appendix E.
- The permittee shall comply with the initial and re-certification procedures of 40 CFR Part 75.
- The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides estimating system: emissions of nitrogen oxides in lb/mmBtu actual heat input on an hourly average basis and emissions of nitrogen oxides in lbs/hr.
- Whenever the monitoring system fails to meet the quality assurance or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.  
[OAC rules 3745-14-01(E)(2)(a), 3745-14-01(E)(5)(a)(ii), 3745-14-08(A)(2)(a) through (A)(2)(d), 3745-14-08(B)(1), and 3745-14-08(C)(1)]
- n. The permittee shall comply with the monitoring plan requirements of 40 CFR Part 75.62, except that the monitoring plan shall also include all of the information required by Subpart H of 40 CFR Part 75.  
[OAC rule 3745-14-08(E)(2)(a)]
- o. The NOx authorized account representative of the NOx budget unit shall submit the reports and compliance certifications required under the NOx budget trading program, including those under OAC rules 3745-14-04 and 3745-14-08, to the Director and Administrator.  
[OAC rule 3745-14-01(E)(5)(b)]

- p. Each submission under the NOx budget trading program shall be submitted, signed, and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NOx authorized account representative:
- "I am authorized to make this submission on behalf of the owners and operators of the NOx budget sources or NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- If the NOx authorized account representative for a NOx budget unit subject to an acid rain emission limitation who signed and certified any submission that is made under Subpart F or G of 40 CFR Part 75 and which includes data and information required under OAC rule 3745-14-08 or Subpart H of 40 CFR Part 75 is not the same person as the designated representative or the alternate designated representative for the unit under 40 CFR Part 72, then the submission shall also be signed by the designated representative or the alternate designated representative.  
[OAC rules 3745-14-02(A)(5) and 3745-14-08(E)(1)(b)]
- q. The NOx authorized account representative shall submit quarterly reports that include all of the data and information required in Subpart H of 40 CFR Part 75 for each NOx budget unit (or group of units using a common stack) and the data and information in Subpart G of 40 CFR Part 75. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30 and October 30 of each year and shall be submitted in the manner specified in Subpart H of 40 CFR Part 75 and 40 CFR Part 75.64.  
[OAC rules 3745-14-08(E)(4)(a) and 3745-14-08(E)(4)(c)(i)]
- r. The NOx authorized account representative shall submit to the Administrator a compliance certification in support of each quarterly report based on a reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The compliance certification shall state that:
- the monitoring data submitted were recorded in accordance with the applicable requirements of OAC rule 3745-14-08 and 40 CFR Part 75, including the quality assurance procedures and specifications; and
  - for a unit with add-on NOx emission controls and for all hours where data are substituted in accordance with 40 CFR Part 75.34(a)(1), the add-on emission control were operating within the range of parameters listed in the quality assurance program under Appendix B of 40 CFR Part 75 and the substitute values do not systematically underestimate the NOx emissions.  
[OAC rule 3745-14-08(E)(4)(d)(i) and (ii)]
- s. The NOx authorized account representative for a NOx budget unit shall submit written notice of monitoring system certification and re-certification test dates to the Director and the Administrator in accordance with 40 CFR Part 75.61. The NOx authorized account representative shall submit a certification application to the Administrator, U.S. EPA, Region V Office, and the Director within forty-five days after completing all initial or re-certification tests required under paragraph (B) of OAC rule 3745-14-08, including the information required under Subpart H of 40 CFR Part 75.  
[OAC rules 3745-14-08(D) and 3745-14-08(E)(3)]
- t. For each control period in which one or more NOx budget units at a source are subject to the NOx budget emission limitation, the NOx authorized account representative of the source shall submit to the Director and the Administrator, by November 30 of that year, a compliance certification report for each source covering all such units.
- The NOx authorized account representative shall include the following elements in the compliance certification report, in a format prescribed by the Administrator, concerning each unit at the source and subject to the NOx budget emission limitation for the control period covered by the report:
- identification of each NOx budget unit;
  - at the NOx authorized account representative's option, the serial numbers of the NOx allowances that are to be deducted from each unit's compliance account under paragraph (E) of OAC rule 3745-14-06 for the control period;
  - at the NOx authorized account representative's option, for units sharing a common stack and having NOx emissions that are not monitored separately or apportioned in accordance with OAC rule 3745-14-08, the percentage of allowances that is to be deducted from each unit's compliance account under paragraph (E)(5) of OAC rule 3745-14-06; and
  - the compliance certification under paragraph (A)(3) of OAC rule 3745-14-04.  
[OAC rules 3745-14-04(A)(1) and 3745-14-04(A)(2)]
- u. In the compliance certification report under Section A.4.t.iv above, the NOx authorized account representative shall certify, based upon reasonable inquiry of those persons with the primary responsibility for operating the source and the NOx budget units at the source in compliance with the NOx budget trading program, whether each NOx budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the

NOx budget trading program applicable to the unit, including all the following:

- i. whether the unit was operated in compliance with the NOx budget emission limitation;
  - ii. whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NOx emissions to the unit, in accordance with OAC rule 3745-14-08;
  - iii. whether all the NOx emissions from the unit, or group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with OAC rule 3745-14-08, and if conditional data were reported, the permittee shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report submissions have been made; and
  - iv. whether the facts that form the basis for certification under OAC rule 3745-14-08 of each monitor at the unit or group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under OAC rule 3745-14-08, if any, have changed.
- u. If a change is required to be reported under Section A.4.u.iv above, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.  
[OAC rule 3745-14-04(A)(3)]
- v. The NOx authorized account representative shall submit a complete NOx budget permit renewal application for the NOx budget source covering the NOx budget units at the source in accordance with paragraph (E) of OAC rule 3745-77-08.  
[OAC rule 3745-14-03(B)(3)(a)]
- w. The emission measurements recorded and reported in accordance with OAC rule 3745-14-08 shall be used to determine compliance by the unit with the NOx budget emission limitation under paragraph (E)(3) of OAC rule 3745-14-01.  
[OAC rule 3745-14-01(E)(2)(b)]
- x. The permittee shall develop and maintain a written quality assurance/quality control plan for each continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on-site and available for inspection during regular office hours.  
[OAC rules 3745-14-08(A)(2)(c) and 3745-14-08(A)(2)(d)]
5. The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart YYYY (NESHAP for Combustion Turbines), in accordance with 40 CFR Parts 63.6080 through 63.6175 (including the Table(s) and Appendix(ices) referenced in Subpart YYYY), which are included in the text of Attachment 1 hereto, and are hereby incorporated into this permit as if fully rewritten.
- Ordinarily, these requirements would be incorporated into Part II of this Title V permit; however, incorporating Subpart YYYY into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and/or equations into STARS format.
- The following emissions units in this permit are subject to the aforementioned requirements: emissions units B001 through B006.
6. The permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements and the general and/or other requirements specified in 40 CFR Part 63, Subpart DDDDD (NESHAP for Industrial/Commercial/Institutional Boilers and Process Heaters), in accordance with 40 CFR Parts 63.7480 through 63.7575 (including the Table(s) and Appendix(ices) referenced in Subpart DDDDD), which are included in the text of Attachment 2 hereto, and are hereby incorporated into this permit as if fully rewritten.
- Ordinarily, these requirements would be incorporated into Part II of this Title V permit; however, incorporating Subpart DDDDD into Part II of this Title V permit was not practical due to technical incompatibilities and the limitations of the STARS program. In addition, numerous difficulties were encountered in attempting to copy and paste the Subpart's tables and/or equations into STARS format.
- The following emissions units in this permit are subject to the aforementioned requirements: emissions units B013 through B018.
7. The following insignificant emissions units are located at this facility:
- B025 - combustion turbine black start unit (Permit to Install 14-1984);  
B026 - diesel fire pump (Permit to Install 14-2179);  
G001 - gasoline dispensing operation (Permit to Install 14-2520);  
L001 - non-halogenated solvent cold parts cleaner (Permit to Install 14-2954); and  
Z006 - 275,000 Btu/hr propane-fired generator.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations,

as well as any emission limitations and/or control requirements contained within the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chapter 3745-17.

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b **State Only Enforceable Section**

1. None

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

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Facility ID: 1409120656 Emissions Unit ID: B001 Issuance type: Title V Final Permit

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
	40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

**2. Additional Terms and Conditions**

- a. Particulate Emission Limitations:

- (a)
- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)\* shall not exceed 40.4 lbs/hr.
  - ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
  - iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.
- \*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).
- b. Nitrogen Oxides (NOx) Emission Limitations:
- i. NOx emissions shall not exceed 261.4 lbs/hr.
  - ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
  - iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
  - iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.
- Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.
- c. Sulfur Dioxide (SO2) Emission Limitations:
- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
  - ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
  - iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
  - iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.
- d. Volatile Organic Compound (VOC) Emission Limitation:
- i. VOC emissions shall not exceed 6.97 lbs/hr.
  - ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.
- e. Carbon Monoxide (CO) Emission Limitation:
- i. CO emissions shall not exceed 25.34 lbs/hr.
  - ii. BACT for the CO emissions from this emissions unit was determined to be burner design.
- f. The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.
- g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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**II. Operational Restrictions**

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:  
  
For any 3-hour period:  
  
gallons of fuel oil =  $35078 / S$   
  
where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)  
  
For any 24-hour period:  
  
gallons of fuel oil =  $158228 / S$   
  
where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)
3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

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

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.

**Sulfur Content:**

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.1. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

**Nitrogen Content:**

To compute the NO<sub>x</sub> emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
  - a. The total hours of operation for this emissions unit.
  - b. The total combined hours of operation for emissions units B001 through B006.
  - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).
5. The permittee shall collect and record the following information:
  - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.

- c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
- d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
- e. The total combined SO<sub>2</sub> emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO<sub>2</sub> emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
- f. The total combined SO<sub>2</sub> emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO<sub>2</sub> emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
- g. Identification of each cold start-up for this emissions unit.
- h. Identification of each shutdown for this emissions unit.

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#### IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO<sub>x</sub> emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO<sub>x</sub> emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. The permittee shall submit quarterly reports that identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
  - b. Any exceedance of the 3-hour and/or 24-hour SO<sub>2</sub> emission limitations when burning fuel oil for emissions units B001 through B006.
  - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
  - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
  - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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#### V. Testing Requirements

1. Emission Limitation:  
Emissions of PE/PM<sub>10</sub> shall not exceed 40.4 lbs/hr.

**Applicable Compliance Method:**

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM10 per second when burning fuel oil, and 0.24 gram of PE/PM10 per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the PE and PM10 emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

**2. Emission Limitation:**

Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.

**Applicable Compliance Method:**

If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

**3. Emission Limitations:**

NOx emissions shall not exceed 261.4 lbs/hr.

When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.

When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.

**Applicable Compliance Method:**

The hourly NOx emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NOx per second when burning fuel oil, and 32.50 grams of NOx per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Compliance with the NOx concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.

If required, the permittee shall demonstrate compliance with the NOx concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).

**4. Emission Limitations:**

When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.

When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.

When burning natural gas or LPG, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.

**Applicable Compliance Method:**

The hourly SO2 emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO2 emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO2 per second when burning fuel oil, and 0.00 gram of SO2 per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

If required, the permittee shall demonstrate compliance with the SO2 concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).

Compliance with the total combined 3-hour and 24-hour SO2 emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.

**5. Emission Limitation:**

CO emissions shall not exceed 25.34 lbs/hr.

**Applicable Compliance Method:**

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

6. Emission Limitation:  
VOC emissions shall not exceed 6.97 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM10 - 40 CFR Part 60, Appendix A, Methods 1 through 5;  
for NOx (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;  
for NOx (concentration) - 40 CFR Part 60, Appendix A, Method 20  
for SO2 - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;  
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and  
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

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

Testing for PE/PM10, NOx, and SO2 shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 1409120656 Emissions Unit ID: B001 Issuance type: Title V Final Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

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

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

- 1. None

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**II. Operational Restrictions**

- 1. None

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

- 1. None

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**IV. Reporting Requirements**

- 1. None

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**V. Testing Requirements**

- 1. None

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**VI. Miscellaneous Requirements**

- 1. None

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

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Facility ID: 1409120656 Emissions Unit ID: B002 Issuance type: Title V Final Permit

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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		<u>Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
	40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

**2. Additional Terms and Conditions**

a. Particulate Emission Limitations:

(a)

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)\* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
- iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

\*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

b. Nitrogen Oxides (NOx) Emission Limitations:

- i. NOx emissions shall not exceed 261.4 lbs/hr.
- ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.

Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.

c. Sulfur Dioxide (SO2) Emission Limitations:

- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
- iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.

- d. Volatile Organic Compound (VOC) Emission Limitation:
  - i. VOC emissions shall not exceed 6.97 lbs/hr.
  - ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.
- e. Carbon Monoxide (CO) Emission Limitation:
  - i. CO emissions shall not exceed 25.34 lbs/hr.
  - ii. BACT for the CO emissions from this emissions unit was determined to be burner design.
- f. The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.
- g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.
 

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

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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#### II. Operational Restrictions

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:
 

For any 3-hour period:

$$\text{gallons of fuel oil} = 35078 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

For any 24-hour period:

$$\text{gallons of fuel oil} = 158228 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)
3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

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

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.
 

Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by

weight). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.1. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

Nitrogen Content:

To compute the NOx emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
  - a. The total hours of operation for this emissions unit.
  - b. The total combined hours of operation for emissions units B001 through B006.
  - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).
5. The permittee shall collect and record the following information:
  - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
  - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
  - e. The total combined SO<sub>2</sub> emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO<sub>2</sub> emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
  - f. The total combined SO<sub>2</sub> emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO<sub>2</sub> emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
  - g. Identification of each cold start-up for this emissions unit.
  - h. Identification of each shutdown for this emissions unit.

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#### IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NOx emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NOx emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that

effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. The permittee shall submit quarterly reports that identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
  - b. Any exceedance of the 3-hour and/or 24-hour SO<sub>2</sub> emission limitations when burning fuel oil for emissions units B001 through B006.
  - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
  - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
  - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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#### V. Testing Requirements

1. Emission Limitation:  
Emissions of PE/PM<sub>10</sub> shall not exceed 40.4 lbs/hr.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM<sub>10</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM<sub>10</sub> per second when burning fuel oil, and 0.24 gram of PE/PM<sub>10</sub> per second when burning natural gas or LPG.  
  
If required, the permittee shall demonstrate compliance with the PE and PM<sub>10</sub> emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
2. Emission Limitation:  
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.  
  
Applicable Compliance Method:  
If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
3. Emission Limitations:  
NO<sub>x</sub> emissions shall not exceed 261.4 lbs/hr.  
  
When burning natural gas, NO<sub>x</sub> emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.  
  
When burning LPG or fuel oil, NO<sub>x</sub> emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.  
  
Applicable Compliance Method:  
The hourly NO<sub>x</sub> emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NO<sub>x</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NO<sub>x</sub> per second when burning fuel oil, and 32.50 grams of NO<sub>x</sub> per second when burning natural gas or LPG.  
  
If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.  
  
Compliance with the NO<sub>x</sub> concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.  
  
If required, the permittee shall demonstrate compliance with the NO<sub>x</sub> concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).

4. Emission Limitations:  
When burning fuel oil, SO<sub>2</sub> emissions shall not exceed 516 lbs/hr from this emissions unit.
- When burning fuel oil, the total combined SO<sub>2</sub> emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- When burning natural gas or LPG, SO<sub>2</sub> emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.
- Applicable Compliance Method:  
The hourly SO<sub>2</sub> emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO<sub>2</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO<sub>2</sub> per second when burning fuel oil, and 0.00 gram of SO<sub>2</sub> per second when burning natural gas or LPG.
- If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- If required, the permittee shall demonstrate compliance with the SO<sub>2</sub> concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).
- Compliance with the total combined 3-hour and 24-hour SO<sub>2</sub> emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.
5. Emission Limitation:  
CO emissions shall not exceed 25.34 lbs/hr.
- Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.
- If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
6. Emission Limitation:  
VOC emissions shall not exceed 6.97 lbs/hr.
- Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.
- If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, VOC, and CO emission limitations in accordance with the following requirements:
- The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.
- Compliance with the applicable PE/PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, VOC, and CO emission limitations shall be determined in accordance with the following:
- for PE/PM<sub>10</sub> - 40 CFR Part 60, Appendix A, Methods 1 through 5;  
for NO<sub>x</sub> (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;  
for NO<sub>x</sub> (concentration) - 40 CFR Part 60, Appendix A, Method 20  
for SO<sub>2</sub> - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;  
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and  
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.
- Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- Testing for PE/PM<sub>10</sub>, NO<sub>x</sub>, and SO<sub>2</sub> shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.
- The tests shall be conducted while the emissions unit is operating at or near its maximum capacity. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification

shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time (s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1409120656 Emissions Unit ID: B002 Issuance type: Title V Final Permit

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. <b>Additional Terms and Conditions</b>			
1.	None		

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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

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Facility ID: 1409120656 Emissions Unit ID: B003 Issuance type: Title V Final Permit

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
	40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

**2. Additional Terms and Conditions**

- a. Particulate Emission Limitations:

(a)

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)\* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.

iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

\*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

b. Nitrogen Oxides (NOx) Emission Limitations:

- i. NOx emissions shall not exceed 261.4 lbs/hr.
- ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.

Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.

c. Sulfur Dioxide (SO2) Emission Limitations:

- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
- iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.

d. Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 6.97 lbs/hr.
- ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.

e. Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 25.34 lbs/hr.
- ii. BACT for the CO emissions from this emissions unit was determined to be burner design.

f. The hourly emission limitations established in PT1 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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II. **Operational Restrictions**

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:

For any 3-hour period:

gallons of fuel oil = 35078 / S

where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

For any 24-hour period:

gallons of fuel oil = 158228 / S

where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

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

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.

#### Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.1. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

#### Nitrogen Content:

To compute the NO<sub>x</sub> emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
  - a. The total hours of operation for this emissions unit.
  - b. The total combined hours of operation for emissions units B001 through B006.
  - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).
5. The permittee shall collect and record the following information:
  - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
  - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.

- e. The total combined SO<sub>2</sub> emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO<sub>2</sub> emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
- f. The total combined SO<sub>2</sub> emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO<sub>2</sub> emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
- g. Identification of each cold start-up for this emissions unit.
- h. Identification of each shutdown for this emissions unit.

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#### IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO<sub>x</sub> emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO<sub>x</sub> emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. The permittee shall submit quarterly reports that identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
  - b. Any exceedance of the 3-hour and/or 24-hour SO<sub>2</sub> emission limitations when burning fuel oil for emissions units B001 through B006.
  - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
  - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
  - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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#### V. Testing Requirements

1. Emission Limitation:  
Emissions of PE/PM<sub>10</sub> shall not exceed 40.4 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM<sub>10</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM<sub>10</sub> per second when burning fuel oil, and 0.24 gram of PE/PM<sub>10</sub> per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the PE and PM10 emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. **Emission Limitation:**  
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.  
  
**Applicable Compliance Method:**  
If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
3. **Emission Limitations:**  
NOx emissions shall not exceed 261.4 lbs/hr.  
  
When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.  
  
When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.  
  
**Applicable Compliance Method:**  
The hourly NOx emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NOx per second when burning fuel oil, and 32.50 grams of NOx per second when burning natural gas or LPG.  
  
If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.  
  
Compliance with the NOx concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.  
  
If required, the permittee shall demonstrate compliance with the NOx concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).
4. **Emission Limitations:**  
When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.  
  
When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.  
  
When burning natural gas or LPG, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.  
  
**Applicable Compliance Method:**  
The hourly SO2 emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO2 emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO2 per second when burning fuel oil, and 0.00 gram of SO2 per second when burning natural gas or LPG.  
  
If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.  
  
If required, the permittee shall demonstrate compliance with the SO2 concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).  
  
Compliance with the total combined 3-hour and 24-hour SO2 emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.
5. **Emission Limitation:**  
CO emissions shall not exceed 25.34 lbs/hr.  
  
**Applicable Compliance Method:**  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
6. **Emission Limitation:**  
VOC emissions shall not exceed 6.97 lbs/hr.  
  
**Applicable Compliance Method:**  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the

technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM10 - 40 CFR Part 60, Appendix A, Methods 1 through 5;  
for NOx (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;  
for NOx (concentration) - 40 CFR Part 60, Appendix A, Method 20  
for SO2 - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;  
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and  
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

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

Testing for PE/PM10, NOx, and SO2 shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

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VI. **Miscellaneous Requirements**

1. None

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**Facility ID: 1409120656 Emissions Unit ID: B003 Issuance type: Title V Final Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

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

1. None

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Part III - Terms and Conditions for Emissions Units

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Facility ID: 1409120656 Emissions Unit ID: B004 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.

OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. **Additional Terms and Conditions**

a. **Particulate Emission Limitations:**

(a)

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)\* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
- iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

\*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

b. **Nitrogen Oxides (NOx) Emission Limitations:**

- i. NOx emissions shall not exceed 261.4 lbs/hr.
- ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.

Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.

c. **Sulfur Dioxide (SO2) Emission Limitations:**

- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
- iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.

d. **Volatile Organic Compound (VOC) Emission Limitation:**

- i. VOC emissions shall not exceed 6.97 lbs/hr.
- ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.

- e. Carbon Monoxide (CO) Emission Limitation:
  - i. CO emissions shall not exceed 25.34 lbs/hr.
  - ii. BACT for the CO emissions from this emissions unit was determined to be burner design.
- f. The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.
- g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.
 

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

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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#### II. Operational Restrictions

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:
 

For any 3-hour period:

$$\text{gallons of fuel oil} = 35078 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

For any 24-hour period:

$$\text{gallons of fuel oil} = 158228 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)
3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

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

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.
 

Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.I. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

Nitrogen Content:

To compute the NOx emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
  - a. The total hours of operation for this emissions unit.
  - b. The total combined hours of operation for emissions units B001 through B006.
  - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).
5. The permittee shall collect and record the following information:
  - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
  - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
  - e. The total combined SO2 emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO2 emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
  - f. The total combined SO2 emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO2 emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
  - g. Identification of each cold start-up for this emissions unit.
  - h. Identification of each shutdown for this emissions unit.

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#### IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NOx emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NOx emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The

summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. The permittee shall submit quarterly reports that identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
  - b. Any exceedance of the 3-hour and/or 24-hour SO<sub>2</sub> emission limitations when burning fuel oil for emissions units B001 through B006.
  - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
  - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
  - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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#### V. Testing Requirements

1. Emission Limitation:  
Emissions of PE/PM<sub>10</sub> shall not exceed 40.4 lbs/hr.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM<sub>10</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM<sub>10</sub> per second when burning fuel oil, and 0.24 gram of PE/PM<sub>10</sub> per second when burning natural gas or LPG.  
  
If required, the permittee shall demonstrate compliance with the PE and PM<sub>10</sub> emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
2. Emission Limitation:  
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.  
  
Applicable Compliance Method:  
If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
3. Emission Limitations:  
NO<sub>x</sub> emissions shall not exceed 261.4 lbs/hr.  
  
When burning natural gas, NO<sub>x</sub> emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.  
  
When burning LPG or fuel oil, NO<sub>x</sub> emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.  
  
Applicable Compliance Method:  
The hourly NO<sub>x</sub> emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NO<sub>x</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NO<sub>x</sub> per second when burning fuel oil, and 32.50 grams of NO<sub>x</sub> per second when burning natural gas or LPG.  
  
If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.  
  
Compliance with the NO<sub>x</sub> concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.  
  
If required, the permittee shall demonstrate compliance with the NO<sub>x</sub> concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).
4. Emission Limitations:  
When burning fuel oil, SO<sub>2</sub> emissions shall not exceed 516 lbs/hr from this emissions unit.  
  
When burning fuel oil, the total combined SO<sub>2</sub> emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.

When burning natural gas or LPG, SO<sub>2</sub> emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.

Applicable Compliance Method:

The hourly SO<sub>2</sub> emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO<sub>2</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO<sub>2</sub> per second when burning fuel oil, and 0.00 gram of SO<sub>2</sub> per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

If required, the permittee shall demonstrate compliance with the SO<sub>2</sub> concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).

Compliance with the total combined 3-hour and 24-hour SO<sub>2</sub> emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.

5. Emission Limitation:  
CO emissions shall not exceed 25.34 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

6. Emission Limitation:  
VOC emissions shall not exceed 6.97 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM<sub>10</sub> - 40 CFR Part 60, Appendix A, Methods 1 through 5;  
for NO<sub>x</sub> (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;  
for NO<sub>x</sub> (concentration) - 40 CFR Part 60, Appendix A, Method 20  
for SO<sub>2</sub> - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;  
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and  
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

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

Testing for PE/PM<sub>10</sub>, NO<sub>x</sub>, and SO<sub>2</sub> shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be

permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1409120656 Emissions Unit ID: B004 Issuance type: Title V Final Permit

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. <b>Additional Terms and Conditions</b>			
1.	None		

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

- 1. None

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

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Facility ID: 1409120656 Emissions Unit ID: B005 Issuance type: Title V Final Permit

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.
	40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. **Additional Terms and Conditions**

- a. Particulate Emission Limitations:

(a)

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)\* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
- iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

\*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

- b. Nitrogen Oxides (NOx) Emission Limitations:
- i. NOx emissions shall not exceed 261.4 lbs/hr.
  - ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
  - iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
  - iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.
- Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.
- c. Sulfur Dioxide (SO2) Emission Limitations:
- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
  - ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
  - iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
  - iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.
- d. Volatile Organic Compound (VOC) Emission Limitation:
- i. VOC emissions shall not exceed 6.97 lbs/hr.
  - ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.
- e. Carbon Monoxide (CO) Emission Limitation:
- i. CO emissions shall not exceed 25.34 lbs/hr.
  - ii. BACT for the CO emissions from this emissions unit was determined to be burner design.
- f. The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.
- g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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## II. Operational Restrictions

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:

For any 3-hour period:

$$\text{gallons of fuel oil} = 35078 / S$$

where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

For any 24-hour period:

gallons of fuel oil = 158228 / S

where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)

3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

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

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.

Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.I. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

Nitrogen Content:

To compute the NO<sub>x</sub> emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
  - a. The total hours of operation for this emissions unit.
  - b. The total combined hours of operation for emissions units B001 through B006.
  - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).
5. The permittee shall collect and record the following information:
  - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
  - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
  - e. The total combined SO<sub>2</sub> emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO<sub>2</sub> emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
  - f. The total combined SO<sub>2</sub> emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods

of operation when burning fuel oil. (The SO<sub>2</sub> emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)

g. Identification of each cold start-up for this emissions unit.

h. Identification of each shutdown for this emissions unit.

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#### IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO<sub>x</sub> emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NO<sub>x</sub> emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. The permittee shall submit quarterly reports that identify each period during which an exemption for ice-fog provided in 40 CFR Part 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.
3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
  - b. Any exceedance of the 3-hour and/or 24-hour SO<sub>2</sub> emission limitations when burning fuel oil for emissions units B001 through B006.
  - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
  - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
  - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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#### V. Testing Requirements

1. Emission Limitation:  
Emissions of PE/PM<sub>10</sub> shall not exceed 40.4 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM<sub>10</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM<sub>10</sub> per second when burning fuel oil, and 0.24 gram of PE/PM<sub>10</sub> per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the PE and PM<sub>10</sub> emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:  
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.
- Applicable Compliance Method:  
If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
3. Emission Limitations:  
NOx emissions shall not exceed 261.4 lbs/hr.
- When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- Applicable Compliance Method:  
The hourly NOx emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NOx per second when burning fuel oil, and 32.50 grams of NOx per second when burning natural gas or LPG.
- If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- Compliance with the NOx concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.
- If required, the permittee shall demonstrate compliance with the NOx concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).
4. Emission Limitations:  
When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- When burning natural gas or LPG, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.
- Applicable Compliance Method:  
The hourly SO2 emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO2 emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO2 per second when burning fuel oil, and 0.00 gram of SO2 per second when burning natural gas or LPG.
- If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- If required, the permittee shall demonstrate compliance with the SO2 concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).
- Compliance with the total combined 3-hour and 24-hour SO2 emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.
5. Emission Limitation:  
CO emissions shall not exceed 25.34 lbs/hr.
- Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.
- If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
6. Emission Limitation:  
VOC emissions shall not exceed 6.97 lbs/hr.
- Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.
- If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio

EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM10, NOx, SO2, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM10 - 40 CFR Part 60, Appendix A, Methods 1 through 5;  
for NOx (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;  
for NOx (concentration) - 40 CFR Part 60, Appendix A, Method 20  
for SO2 - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;  
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and  
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

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

Testing for PE/PM10, NOx, and SO2 shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

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**VI. Miscellaneous Requirements**

1. None

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**Facility ID: 1409120656 Emissions Unit ID: B005 Issuance type: Title V Final Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

- |   | <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|---|--------------------------------------|--|
| 2. <b>Additional Terms and Conditions</b> |   |                                      |  |
| 1. None                                   |   |                                      |  |

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1409120656 Emissions Unit ID: B006 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
natural gas, liquid petroleum gas (LPG), and fuel oil-fired, simple cycle combustion turbine having a nominal heat input capacity of 1034 MMBtu/hr with a water injection system for the control of nitrogen oxides	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.1 through A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20.

40 CFR Part 60, Subpart GG	See A.II.4 below. The nitrogen oxides and sulfur dioxide emission limitations and/or content restrictions specified in 40 CFR Part 60, Subpart GG are equivalent to or less stringent than the emission limitations and/or content restrictions established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
OAC rule 3745-17-07(A)	The visible particulate emission limitations specified in OAC rule 3745-17-07(A) are less stringent than the visible particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
OAC rule 3745-17-11(B)(4)	The particulate emission limitation specified in OAC rule 3745-17-11(B)(4) is less stringent than The particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
OAC rule 3745-18-15(P)	The sulfur dioxide emission limitation specified in OAC rule 3745-18-15(P) is less stringent than the sulfur dioxide emission limitations established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. **Additional Terms and Conditions**

a. Particulate Emission Limitations:

(a)

- i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10)\* shall not exceed 40.4 lbs/hr.
- ii. Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods. Cold start-up shall be defined as the time necessary to bring this emissions unit on line from a cold state to turbine synchronization.
- iii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and compliance with the visible particulate emission limitation.

\*The total PM10 emissions were evaluated and did not trigger any additional federal requirements, therefore, the emissions are being regulated as particulate emissions (PE).

b. Nitrogen Oxides (NOx) Emission Limitations:

- i. NOx emissions shall not exceed 261.4 lbs/hr.
- ii. When burning natural gas, NOx emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.
- iii. When burning LPG or fuel oil, NOx emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.
- iv. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design and water injection.

Pursuant to 40 CFR Part 60.332(f), this emissions unit is exempt from the NOx concentration emission limitations when ice fog, as defined in 40 CFR Part 60.331(f), is deemed a traffic hazard by the permittee.

c. Sulfur Dioxide (SO2) Emission Limitations:

- i. When burning fuel oil, SO2 emissions shall not exceed 516 lbs/hr from this emissions unit.
- ii. When burning fuel oil, the total combined SO2 emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.
- iii. When burning natural gas or LPG in this emissions unit, SO2 emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis.
- iv. BACT for the SO2 emissions from this emissions unit was determined to be use of a low sulfur content fuel and compliance with the emission limitations in 2.c.ii above.

d. Volatile Organic Compound (VOC) Emission Limitation:

- i. VOC emissions shall not exceed 6.97 lbs/hr.
- ii. BACT for the VOC emissions from this emissions unit was determined to be the low VOC emission rate and compliance with the operational restrictions.

e. Carbon Monoxide (CO) Emission Limitation:

- i. CO emissions shall not exceed 25.34 lbs/hr.

- ii. BACT for the CO emissions from this emissions unit was determined to be burner design.
- f. The hourly emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.
- g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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## II. Operational Restrictions

1. The sulfur content of the fuel oil burned in this emissions unit shall not exceed 0.5%, by weight.
2. The total combined amount of fuel oil burned in emissions units B001 through B006 shall not exceed the amounts specified by the following equations:  
  
For any 3-hour period:  
  
gallons of fuel oil =  $35078 / S$   
  
where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)  
  
For any 24-hour period:  
  
gallons of fuel oil =  $158228 / S$   
  
where: S = the sulfur content of the fuel oil, in percent, by weight  
(e.g., if the fuel oil sulfur content is 0.5%, then S = 0.5)
3. The total combined operating hours for emissions units B001 through B006 shall not exceed 17,844 hours per rolling, 12-month period.
4. The minimum stack height for this emissions unit shall be at least 213 feet above the ground.
5. The permittee shall burn only natural gas, LPG, and/or fuel oil in this emissions unit.

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## III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, LPG, and/or fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this emissions unit. This system shall be accurate to within plus or minus 5% and shall be approved by the Administrator of the U.S. EPA.
3. The permittee shall monitor the sulfur content and nitrogen content of the fuel being fired in this emissions unit as specified below.

### Sulfur Content:

For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content (in %, by weight). A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall collect and record the sulfur content of the natural gas and LPG being fired in this emissions unit on a quarterly basis in accordance with the approved custom schedule for this facility.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60.335(d), 40 CFR Part 75, or the appropriate ASTM methods, or equivalent methods as approved by the Administrator of the U.S. EPA.

Should any sulfur analysis indicate noncompliance with 40 CFR Part 60.333 or the sulfur content limitation stated in section A.1. of this permit, the permittee shall notify Hamilton County Department of Environmental Services - Air Quality Division of the exceedance and the custom schedule shall be re-examined. During the re-examination period the permittee shall conduct daily sulfur monitoring and submit these analyses to Hamilton County Department of Environmental Services - Air Quality Division.

Nitrogen Content:

To compute the NOx emissions, the permittee shall use analytical methods and procedures that are accurate to within 5% and are approved by the Administrator of the U.S. EPA to determine the nitrogen content of the fuel being fired.

4. The permittee shall collect and record the following information on a monthly basis:
  - a. The total hours of operation for this emissions unit.
  - b. The total combined hours of operation for emissions units B001 through B006.
  - c. The rolling, 12-month summation of the total combined hours of operation for emissions units B001 through B006 (the summation of the current month's total combined hours of operation recorded in 4.b added to the previous 11 months total combined hours of operation).
5. The permittee shall collect and record the following information:
  - a. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - b. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 3-hour periods of operation.
  - c. The total combined number of gallons of fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
  - d. The percent sulfur content, by weight, of the fuel oil supplied to emissions units B001 through B006 for all 24-hour periods of operation.
  - e. The total combined SO<sub>2</sub> emissions, in lbs, for emissions units B001 through B006 for all 3-hour periods of operation when burning fuel oil. (The SO<sub>2</sub> emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
  - f. The total combined SO<sub>2</sub> emissions, in lbs, for emissions units B001 through B006 for all 24-hour periods of operation when burning fuel oil. (The SO<sub>2</sub> emissions shall be calculated using the fuel oil usage and fuel oil sulfur content data above.)
  - g. Identification of each cold start-up for this emissions unit.
  - h. Identification of each shutdown for this emissions unit.

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#### IV. Reporting Requirements

1. Pursuant to 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any 1-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio established during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NOx emission limitations or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the most recent performance test that demonstrated that the emissions unit was in compliance with the applicable NOx emission limitations. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and the nitrogen content of the fuel during the period of excess emissions. The graphs or figures developed under 40 CFR Part 60.335(a) shall also be submitted with each report.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Hamilton County Department of Environmental Services - Air Quality Division documenting any continuous water-to-fuel monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the continuous monitoring system while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to 40 CFR Part 60.7, the permittee shall submit a summary of the excess emission report. The summary shall be submitted in accordance with 40 CFR Part 60.7(d) to the Hamilton County Department of Environmental Services - Air Quality Division within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

2. The permittee shall submit quarterly reports that identify each period during which an exemption for ice-fog

provided in 40 CFR Part 60.332(f) is in effect. The report shall include the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time when the air pollution control system was reactivated.

3. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. Any exceedance of the 3-hour and/or 24-hour total combined fuel oil usage restrictions for emissions units B001 through B006 when burning fuel oil as calculated in section A.II.2.
  - b. Any exceedance of the 3-hour and/or 24-hour SO<sub>2</sub> emission limitations when burning fuel oil for emissions units B001 through B006.
  - c. Any exceedance of the total combined operating hours restriction for emissions units B001 through B006.
  - d. Any exceedance of the 0.5%, by weight, fuel oil sulfur content restriction for this emissions unit.
  - e. Each day when a fuel other than natural gas, LPG, and/or fuel oil was burned in this emissions unit.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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#### V. Testing Requirements

1. Emission Limitation:  
Emissions of PE/PM<sub>10</sub> shall not exceed 40.4 lbs/hr.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM<sub>10</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 5.10 grams of PE/PM<sub>10</sub> per second when burning fuel oil, and 0.24 gram of PE/PM<sub>10</sub> per second when burning natural gas or LPG.  
  
If required, the permittee shall demonstrate compliance with the PE and PM<sub>10</sub> emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
2. Emission Limitation:  
Visible PE from any combustion turbine stack shall not exceed 10% opacity, as a 6-minute average, except for cold start-up and shutdown periods.  
  
Applicable Compliance Method:  
If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.
3. Emission Limitations:  
NO<sub>x</sub> emissions shall not exceed 261.4 lbs/hr.  
  
When burning natural gas, NO<sub>x</sub> emissions shall not exceed 42 ppm at 15% oxygen, on a dry basis.  
  
When burning LPG or fuel oil, NO<sub>x</sub> emissions shall not exceed 65 ppm at 15% oxygen, on a dry basis.  
  
Applicable Compliance Method:  
The hourly NO<sub>x</sub> emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NO<sub>x</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 33.00 grams of NO<sub>x</sub> per second when burning fuel oil, and 32.50 grams of NO<sub>x</sub> per second when burning natural gas or LPG.  
  
If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.  
  
Compliance with the NO<sub>x</sub> concentration emission limitations may be demonstrated based upon the records required pursuant to Section A.III.2.  
  
If required, the permittee shall demonstrate compliance with the NO<sub>x</sub> concentration emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60.335(c).
4. Emission Limitations:  
When burning fuel oil, SO<sub>2</sub> emissions shall not exceed 516 lbs/hr from this emissions unit.  
  
When burning fuel oil, the total combined SO<sub>2</sub> emissions from emissions units B001 through B006 shall not exceed 4911 lbs per 3-hour period and 22,152 lbs per 24-hour period.  
  
When burning natural gas or LPG, SO<sub>2</sub> emissions shall not exceed 0.015%, by volume, at 15% oxygen on a dry basis from this emissions unit.  
  
Applicable Compliance Method:  
The hourly SO<sub>2</sub> emission limitation reflects the emissions unit's potential to emit. Compliance with this

emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The SO<sub>2</sub> emission factor in Table 2.3 of Permit to Install 14-1905 is 65.13 grams of SO<sub>2</sub> per second when burning fuel oil, and 0.00 gram of SO<sub>2</sub> per second when burning natural gas or LPG.

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

If required, the permittee shall demonstrate compliance with the SO<sub>2</sub> concentration emission limitation in accordance with the method and procedures specified in 40 CFR Part 60.335(c)(3).

Compliance with the total combined 3-hour and 24-hour SO<sub>2</sub> emission limitations for emissions units B001 through B006 may be demonstrated based upon the records required pursuant to Section A.III.5.

5. Emission Limitation:  
CO emissions shall not exceed 25.34 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 3.20 grams of CO per second when burning fuel oil, natural gas, or LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

6. Emission Limitation:  
VOC emissions shall not exceed 6.97 lbs/hr.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.88 gram of VOC per second when burning fuel oil, natural gas, or LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 while burning natural gas. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

7. Upon initial use of fuel oil, the permittee shall conduct, or have conducted, emission testing for this emissions unit to demonstrate compliance with the applicable PE/PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, VOC, and CO emission limitations in accordance with the following requirements:

The emission testing shall be conducted within 90 days of initiating fuel oil firing, unless an alternative schedule is submitted and approved by Hamilton County Department of Environmental Services-Air Quality Control Division. The frequency for future emission testing while burning fuel oil will be determined based upon the results of the initial emission tests and the procedures specified in Ohio EPA Engineering Guide 16.

Compliance with the applicable PE/PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, VOC, and CO emission limitations shall be determined in accordance with the following:

for PE/PM<sub>10</sub> - 40 CFR Part 60, Appendix A, Methods 1 through 5;  
for NO<sub>x</sub> (hourly) - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7;  
for NO<sub>x</sub> (concentration) - 40 CFR Part 60, Appendix A, Method 20  
for SO<sub>2</sub> - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6;  
for VOC - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25; and  
for CO - 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

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

Testing for PE/PM<sub>10</sub>, NO<sub>x</sub>, and SO<sub>2</sub> shall be performed on each emissions unit. Testing for CO and VOC shall be performed on one emissions unit that is representative of the permitted combustion turbine units (B001 through B006). Prior to performing CO and VOC testing, the permittee shall obtain agreement on the emissions unit to be tested as a representative unit from the Hamilton County Department of Environmental Services-Air Quality Control Division.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Department of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Department of Environmental Services' refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Department of Environmental Services and Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or

persons responsible for the tests and submitted to the Hamilton County Department of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Department of Environmental Services.

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VI. **Miscellaneous Requirements**

- 1. None

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**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. <b>Additional Terms and Conditions</b>			
1.	None		

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1409120656 Emissions Unit ID: B013 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. Additional Terms and Conditions

- a. Particulate Emission Limitation:
  - (a)
    - i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
    - ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - b. Nitrogen Oxides (NOx) Emission Limitation:
    - i. NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
    - ii. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design.
  - c. Carbon Monoxide (CO) Emission Limitation:
    - i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
    - ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - d. Volatile Organic Compound (VOC) Emission Limitation:
    - i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
    - ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

- e. Sulfur Dioxide (SO<sub>2</sub>) Emissions:
- i. BACT for the SO<sub>2</sub> emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - ii. SO<sub>2</sub> emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.
- f. The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.
- g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.
- On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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**II. Operational Restrictions**

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

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

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:
  - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
  - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

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**IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each day when a fuel other than LPG was burned in this emissions unit; and
  - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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**V. Testing Requirements**

1. Emission Limitation:
 

PE/PM<sub>10</sub> shall not exceed 0.27 lb/1000 gallons of LPG burned.

Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission

limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- 2. Emission Limitation:  
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- 3. Emission Limitation:  
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- 4. Emission Limitation:  
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.

Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

- 5. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

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

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VI. **Miscellaneous Requirements**

- 1. None

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**Facility ID: 1409120656 Emissions Unit ID: B013 Issuance type: Title V Final Permit**

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

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

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

1. None

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1409120656 Emissions Unit ID: B014 Issuance type: Title V Final Permit

A. State and Federally Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.

OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. **Additional Terms and Conditions**

a. Particulate Emission Limitation:

(a)

i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.

ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

b. Nitrogen Oxides (NOx) Emission Limitation:

i. NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.

ii. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design.

c. Carbon Monoxide (CO) Emission Limitation:

i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.

ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

d. Volatile Organic Compound (VOC) Emission Limitation:

i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.

ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

e. Sulfur Dioxide (SO2) Emissions:

i. BACT for the SO2 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.

ii. SO2 emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.

f. The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.

g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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**II. Operational Restrictions**

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

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

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:
  - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
  - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

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**IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each day when a fuel other than LPG was burned in this emissions unit; and
  - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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**V. Testing Requirements**

1. Emission Limitation:  
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
2. Emission Limitation:  
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
3. Emission Limitation:  
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
4. Emission Limitation:

VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.

**Applicable Compliance Method:**

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

5. **Emission Limitation:**

Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

**Applicable Compliance Method:**

If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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VI. **Miscellaneous Requirements**

- 1. None

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**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. <b>Additional Terms and Conditions</b>			
1.	None		

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II. **Operational Restrictions**

- 1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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Facility ID: 1409120656 Emissions Unit ID: B015 Issuance type: Title V Final Permit

A. **State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

2. **Additional Terms and Conditions**

- a. Particulate Emission Limitation:
  - (a)
    - i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
    - ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - b. Nitrogen Oxides (NOx) Emission Limitation:
    - i. NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
    - ii. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design.

- c. Carbon Monoxide (CO) Emission Limitation:
  - i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
  - ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- d. Volatile Organic Compound (VOC) Emission Limitation:
  - i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
  - ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- e. Sulfur Dioxide (SO<sub>2</sub>) Emissions:
  - i. BACT for the SO<sub>2</sub> emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - ii. SO<sub>2</sub> emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.
- f. The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.
- g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.
 

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

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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#### II. Operational Restrictions

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

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

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:
  - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
  - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

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#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each day when a fuel other than LPG was burned in this emissions unit; and

- b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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V. **Testing Requirements**

1. Emission Limitation:  
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
2. Emission Limitation:  
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
3. Emission Limitation:  
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
4. Emission Limitation:  
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
5. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method:  
If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1409120656 Emissions Unit ID: B015 Issuance type: Title V Final Permit

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. <b>Additional Terms and Conditions</b>		
1. None		

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**II. Operational Restrictions**

1. None

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

1. None

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**IV. Reporting Requirements**

1. None

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**V. Testing Requirements**

1. None

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**VI. Miscellaneous Requirements**

1. None

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

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Facility ID: 1409120656 Emissions Unit ID: B016 Issuance type: Title V Final Permit

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

**2. Additional Terms and Conditions**

- a. Particulate Emission Limitation:
  - (a)
    - i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
    - ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - b. Nitrogen Oxides (NOx) Emission Limitation:
    - i. NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
    - ii. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design.
  - c. Carbon Monoxide (CO) Emission Limitation:
    - i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
    - ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - d. Volatile Organic Compound (VOC) Emission Limitation:
    - i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
    - ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - e. Sulfur Dioxide (SO2) Emissions:
    - i. BACT for the SO2 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
    - ii. SO2 emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.
  - f. The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.
  - g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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**II. Operational Restrictions**

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

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

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:
  - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
  - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

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**IV. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each day when a fuel other than LPG was burned in this emissions unit; and
  - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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**V. Testing Requirements**

1. Emission Limitation:  
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
2. Emission Limitation:  
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7. Alternate U.S.

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

3. Emission Limitation:  
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
4. Emission Limitation:  
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
5. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method:  
If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1409120656 Emissions Unit ID: B016 Issuance type: Title V Final Permit

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

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

1. None

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II. **Operational Restrictions**

1. None

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

- 1. None

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IV. **Reporting Requirements**

- 1. None

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V. **Testing Requirements**

- 1. None

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VI. **Miscellaneous Requirements**

- 1. None

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**Facility ID: 1409120656 Emissions Unit ID: B017 Issuance type: Title V Final Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

- 1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

- 2. **Additional Terms and Conditions**

- a. Particulate Emission Limitation:
  - (a) i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
  - ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- b. Nitrogen Oxides (NOx) Emission Limitation:
  - i. NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
  - ii. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design.
- c. Carbon Monoxide (CO) Emission Limitation:
  - i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
  - ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- d. Volatile Organic Compound (VOC) Emission Limitation:
  - i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
  - ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
- e. Sulfur Dioxide (SO2) Emissions:
  - i. BACT for the SO2 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - ii. SO2 emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.
- f. The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.
- g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.
 

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

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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**II. Operational Restrictions**

1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
2. The permittee shall burn only LPG in this emissions unit.
3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

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

1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall collect and record the following information on a monthly basis:

- a. The total combined amount of LPG gas burned in emissions units B013 through B018.
  - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

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#### IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each day when a fuel other than LPG was burned in this emissions unit; and
  - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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#### V. Testing Requirements

1. Emission Limitation:  
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
2. Emission Limitation:  
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
3. Emission Limitation:  
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
4. Emission Limitation:  
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.  
  
Applicable Compliance Method:  
This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.  
  
If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
5. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.  
  
Applicable Compliance Method:  
If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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VI. **Miscellaneous Requirements**

1. None

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Facility ID: 1409120656 Emissions Unit ID: B017 Issuance type: Title V Final Permit

**B. State Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2. <b>Additional Terms and Conditions</b>			
1.	None		

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None

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

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**Facility ID: 1409120656 Emissions Unit ID: B018 Issuance type: Title V Final Permit**

**A. State and Federally Enforceable Section**

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

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

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
21 MMBtu/hr liquid petroleum gas (LPG)-fired vaporizing boiler (non-steam generating)	40 CFR Part 52.21 and OAC rules 3745-31-11 through 3745-31-20 (PTI 14-1905)	See A.I.2.a through A.I.2.f and A.II.3 below.
	OAC rule 3745-31-05(A)(3) (PTI 14-1905)	Compliance with this rule also includes compliance with 40 CFR Part 52.21, OAC rules 3745-31-11 through 3745-31-20, and OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	See A.II.1 below. Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-10(B)	The particulate emission limitation specified in OAC rule 3745-17-10(B) is less stringent than the particulate emission limitation established in PTI 14-1905 pursuant to 40 CFR Part 52.21.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.g below.

**2. Additional Terms and Conditions**

- a. Particulate Emission Limitation:
  - (a)
    - i. Emissions of particulates and particulates less than 10 microns in diameter (PE/PM10) shall not exceed 0.27 lb/1000 gallons of LPG burned.
    - ii. Best available control technology (BACT) for the PE/PM10 emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - b. Nitrogen Oxides (NOx) Emission Limitation:
    - i. NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.
    - ii. BACT for the NOx emissions from this emissions unit was determined to be a low NOx burner design.
  - c. Carbon Monoxide (CO) Emission Limitation:
    - i. CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.
    - ii. BACT for the CO emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - d. Volatile Organic Compound (VOC) Emission Limitation:
    - i. VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.
    - ii. BACT for the VOC emissions from this emissions unit was determined to be burner design, combustion control, and the use of LPG fuel.
  - e. Sulfur Dioxide (SO2) Emissions:
    - i. BACT for the SO2 emissions from this emissions unit was determined to be burner design,

combustion control, and the use of LPG fuel.

- ii. SO2 emission limitations were not established in PTI 14-1905 because emissions were negligible for this emissions unit.
- f. The pound(s) per 1000 gallons of LPG burned emission limitations established in PTI 14-1905 were based on the emissions unit's potentials to emit. Therefore, it is not necessary to develop any additional monitoring, record keeping or reporting requirements to ensure compliance with these emission limitations.
  - g. 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 control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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

The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available control technology requirements established pursuant to 40 CFR Part 52.21 in Permit to Install 14-1905.

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#### II. Operational Restrictions

- 1. The minimum stack height for this emissions unit shall be at least 80 feet above the ground.
- 2. The permittee shall burn only LPG in this emissions unit.
- 3. The total combined amount of LPG burned in emissions units B013 through B018 shall not exceed 4.9 million gallons per rolling, 12-month period.

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

- 1. For each day during which the permittee burns a fuel other than LPG, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- 2. The permittee shall collect and record the following information on a monthly basis:
  - a. The total combined amount of LPG gas burned in emissions units B013 through B018.
  - b. The rolling, 12-month summation of the total combined amount of LPG gas burned in emissions units B013 through B018 (the summation of the current month's total combined amount of LPG gas burned recorded in line 2.a, added to the previous 11 months total combined amount of LPG gas burned).

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#### IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. each day when a fuel other than LPG was burned in this emissions unit; and
  - b. any monthly record which shows an exceedance of the LPG usage restriction specified in Section A.II.3.

The quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part I - General Term and Condition A.1.c.ii.

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#### V. Testing Requirements

- 1. Emission Limitation:  
PE/PM10 shall not exceed 0.27 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The PE/PM10 emission factor in Table 2.3 of Permit to Install 14-1905 is 0.015 gram of PE/PM10 per second when burning LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

2. Emission Limitation:  
NOx emissions shall not exceed 12.4 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD Permit to Install 14-1905. The NOx emission factor in Table 2.3 of Permit to Install 14-1905 is 0.43 gram of NOx per second when burning LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

3. Emission Limitation:  
CO emissions shall not exceed 3.1 lbs/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The CO emission factor in Table 2.3 of Permit to Install 14-1905 is 0.108 gram of CO per second when burning LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

4. Emission Limitation:  
VOC emissions shall not exceed 0.25 lb/1000 gallons of LPG burned.

Applicable Compliance Method:

This emission limitation reflects the emissions unit's potential to emit. Compliance with this emission limitation may be demonstrated through the emission factors and equations found in Table 2.3 of the technical support document submitted 8/25/89 for PSD permit 14-1905. The VOC emission factor in Table 2.3 of Permit to Install 14-1905 is 0.009 gram of VOC per second when burning LPG.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25. Alternate U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

5. Emission Limitation:  
Visible particulate emissions shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with this emission limitation shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

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VI. Miscellaneous Requirements

1. None

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Facility ID: 1409120656 Emissions Unit ID: B018 Issuance type: Title V Final Permit

B. State Enforceable Section

The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

1. None.

I. Applicable Emissions Limitations and/or Control Requirements

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

control measures (if any) may be specified in narrative form following the table.

	<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2.	<b>Additional Terms and Conditions</b>		
1.	None		

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II. **Operational Restrictions**

1. None

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

1. None

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IV. **Reporting Requirements**

1. None

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V. **Testing Requirements**

1. None

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VI. **Miscellaneous Requirements**

1. None